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Canadian Atlantic Fisheries
Scientific Advisory Committee

CAFSAC Research Document 83/80

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Comité scientifique consultatif des
pêches canadiennes dans l'Atlantique

CSCPCA Document de recherche 83/80

Status of Atlantic Salmon Stocks in Newfoundland and Labrador, 1983

by

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Abstract

A preliminary analysis of the 1983 commercial fishery for insular Newfoundland and Labrador revealed a substantial decline in harvest from 1982 and the long-term average. The recreational fishery was average for the most part, suggesting that spawning escapements were average. Fishway counts compared well with previous years. With respect to the commercial fishery, it appears that general lower than average abundance resulted in a lower expenditure of effort which, coupled with the prevalence of icebergs in the case of eastern insular Newfoundland and pack ice in Labrador, resulted in lower than usual exploitation. This resulted in a higher than usual release of fish to return to the rivers and hence spawning escapements were maintained at previous levels. Predicted levels of abundance are provided for the next several years.

Résumé

Une analyse préliminaire de la pêche commerciale du saumon à Terre-Neuve et au Labrador indique une diminution substantielle de la récolte depuis 1982, ainsi que de la moyenne à long terme. La pêche récréative, pour sa part, a donné une récolte généralement moyenne, ce qui laisse supposer un échappement moyen pour la reproduction. Les comptages aux passes migratories se comparent bien avec ceux des années antérieures. Pour ce qui est de la pêche commerciale, il semble que l'abondance générale, inférieure à la moyenne, ait résulté en un effort moindre, ce qui, couplé à la présence d'icebergs à l'est de l'île de Terre-Neuve et de glace de pack au Labrador, entraîna une exploitation inférieure à la moyenne. Il en est résulté l'échappement d'un plus grand nombre de poissons que d'habitude, qui purent ainsi retourner en rivière et maintenir le nombre des reproducteurs au niveau des années antérieures. Nous donnons des projections d'abondance pour plusieurs années à venir.

103-01525

Introduction

This paper provides an update of Atlantic salmon catch and effort statistics for the commercial and recreational fisheries in insular Newfoundland and Labrador and counts from several fishways (insular Newfoundland) in 1983. This information is used to examine the current status of stocks in relation to historical data and long-term trends.

Methods

The 1983 catch and effort data were added to that previously presented by Moores et al. (1978), Moores and Tucker (1979, 1980), Moores and Ash (unpublished) and Ash (unpublished) for the recreational fishery and to that found in May and Lear (1971), Waldron (1974), Reddin and Waldron (1976), Reddin and Day (1980), Short and Reddin (1981a, 1981b), Moores et al. (unpublished), and Ash (unpublished) for the commercial fishery. Simple correlations and means were used for trend analysis. Effort in the commercial fishery was presented as the numbers of gear units (50 fathoms of gill net or salmon trap) licenced to prosecute the fishery. The accuracy of commercial effort figures prior to 1973 is somewhat questionable. Recreational fishing effort was presented as rod days (defined as any day or part thereof on which an angler fishes) and represents actual effort reported by DFO personnel. It contains an estimation of catch and effort during staff days off.

Mean weights of small (1SW) and large (MSW) salmon were are derived using data obtained from commercial purchase slips. Total numbers of large and small fish were calculated by dividing total Statistical Area catches by the respective derived mean weights. Where there was no mean weight a default value was used derived from samples obtained directly from the commercial fishery.

Means and standard deviations for ratio variables were calculated by the following formula (Cochran 1977):

$$R = \bar{X}/\bar{Y} \quad \text{or} \quad \Sigma X_i/\Sigma Y_i, \qquad \text{where } R = \text{estimate of mean of } X/Y$$

$$S(R) = \frac{1}{\sqrt{n}.\bar{Y}\sqrt{n-1}} \sqrt{\Sigma X_i^2 - 2R\Sigma X_i Y_i + R^2\Sigma Y_i^2}$$

Results and Discussion

Compared with the long-term mean (1969-1982), commercial landings for all of insular Newfoundland (Table 1) in 1983 showed a decline. In terms of weight, landings for 1SW and MSW salmon were down 37 and 49% respectively; with respect to numbers of fish, the corresponding declines were 36 and 46% respectively. Total commercial catch by weight for all of Labrador (Table 2) declined by 26% from the 1952-1982 mean; the number of 1SW and MSW salmon declined by 11 and 30% respectively. Numbers of small and large fish caught in

the Newfoundland Region (insular) recreational fishery (Table 3) showed an increase of 16 and 17% respectively over the 1969-1982 mean. For the Labrador portion of the Newfoundland Region (Table 4), an increase above the 1954-1982 mean was noted (10% for small and large). Regressions of commercial catch and effort on time for insular Newfoundland (Table 1) were negative but not significant; catch per unit effort was negative and significant. For Labrador (Table 2), regressions of commercial catch and effort were positive and significant; catch per unit effort was positive but not significant. For the Newfoundland Region (insular) recreational fishery (Table 3) catch and effort showed a significant increase while catch per unit effort declined but not significantly so. For the Newfoundland Region (Labrador) recreational fishery (Table 4), significant positive trends were noted for catch, effort and catch per unit effort. On a Statistical Area/Section (Fig. 1 and 2) basis, for the Newfoundland Region commercial fishery (Table 5), landings (number of fish) were generally below the 95% confidence limits of the 1969-1982 mean while for the recreational fishery (Table 6) the reverse was true with the numbers of fish caught being for the most part above or within the 95% confidence limits of the 1969-1982 mean. Commercial and recreational fishery statistics for each Statistical Area are summarized in Appendix 1a-o and Appendix 2a-o respectively. Recreational catch and effort data are presented graphically in Fig. 3-17.

The low commercial catch is indicative of low abundance. In 1978, except for Statistical Area A, recreational catches (1SW fish) for the insular portion of the Newfoundland Region were average in spite of the poor survival of the 1977 smolt class. Fishway counts on several rivers in 1978 were also comparable to previous years (Tables 7 and 8). Using recreational catch as an index of spawning escapement (Chadwick 1982), one would have expected the abundance of 1SW fish in 1983 to have been average. This implies of course that the apparent low abundance in 1983 was not the result of the 1977 smolt class. By comparing river age structure in the Newfoundland and Labrador recreational and commercial fisheries in 1983 with that of previous years, an attempt was made to detect changes in age composition related to the apparent failure of the 1977 smolt class (Reddin and Dempson, in prep.). The results showed no evidence to suggest that smolt production emanating from the 1977 smolt class was different from previous years. It should be pointed out that due to the fact that modal smolt age in Labrador is 4+ years as opposed to 3+ years for most of insular Newfoundland, any significant impact on the fisheries of the low spawning escapements in 1978 will not be felt until 1984 (1SW) and 1985 (2SW). For both insular Newfoundland and Labrador, there is no ready explanation for the low abundance of 2SW fish in 1983 which were spawned for most part prior to the effect of the 1977 smolt class. It is possible that general low abundance in 1983 was due to overall marine mortality.

As already seen, while commercial catch was generally low, recreational catch remained average for most part. Several factors could account for the discrepancy in abundance between the commercial fishery and river escapements. The presence of Arctic pack ice in southern Labrador until the end of June and until the end of July in northern Labrador could have affected catches not only through its effect on the placement and maintenance of gear but also through the effect of ice on water temperature. In eastern insular Newfoundland, there is evidence from a commercial fishery survey (O'Connell et al., unpublished)

that the same result was brought about by the prevalence of icebergs throughout most of May and June. Another factor to be considered is a possible relationship between the amount of effort expended in the fishery and fishing success. There is evidence from the commercial fishery survey referred to above that poor catches early in the season in an area not as affected by ice resulted in only a small percentage of licensed gear being used; also, poor success in fishing for salmon resulted in greater emphasis being placed on the exploitation of other species. Either or both of the above factors could have resulted in lower than normal exploitation in the commercial fishery with a concomitant higher than usual release of fish to return to the rivers. The level of exploitation in the recreational fishery in 1983 as evidenced by effort data presented in Tables 3 and 4 remained much the same as in 1982.

Based on an overall significant relationship between 1SW fish caught in the commercial fishery in year n on large salmon caught in year n+1 (Table 1), it is projected that there will be a low abundance of 2SW fish for most of insular Newfoundland in 1984 (Table 5). This is supported by findings that low catches at West Greenland are associated with low catches in Canadian home waters for fish from the same smolt class (poor catches in West Greenland in 1978 and 1982 were followed by poor catches at home in 1979 and 1983). The catch at West Greenland in 1983 is not expected to exceed 350 tonnes which is approximately 25% of the quota. It is not known however if low availability of fish at West Greenland was due to low abundance (i.e. the 1977 smolt class) or environmental conditions (unusually low water temperatures prevailed for most of the season) or both factors. Based on recreational catches in 1979 (used as an index of spawning escapement) which were average compared with the long-term mean, the abundance of 1SW fish in 1984 for the insular portion of the Newfoundland Region should likewise be average in most cases (Table 6); however, it should be remembered that a similar prediction for 1978 spawners mentioned above did not hold true. Based on the relationship between grilse and large salmon, one would also expect the abundance of 2SW fish in 1985 to be average. As pointed out earlier, if there is low abundance associated with the 1977 smolt class for Labrador, its effect won't be felt until 1984 (1SW) and 1985 (2SW). In this regard, based on a low abundance of spawners in 1978, it is possible that 1SW fish will be low in abundance in 1984 in Sections 51 and 52 and 2SW fish will be low in 1985 (grilse vs large salmon relationship) (Table 6). It should be pointed out that the recreational fishery in Labrador may not be a useful guide for estimating spawning escapements because of the relatively low numbers caught and the fact that some camps continually fail to report catches. Based on recreational catches from 1980 up to and including 1983 and considering fishway counts on several rivers (insular Newfoundland) which also indicated average river escapements, if a stock-recruitment relation exists (which is a tenuous assumption in view of the above), it is reasonable to predict that adult abundance from 1986 to 1990 should be average.

An obvious drawback which seriously limits one's ability to make assessments is the lack of information such as smolt counts, smolt-adult survival, etc., on an index river basis. This is evidenced by the necessity above to arrive at abundance through indirect means such as examination of freshwater age composition. Also there is a paucity of accurate effort information in the commercial fishery. Effort values provided at present (Tables 1 and 2) are potential effort and not the actual amount of gear used,

which in reality could be considerably lower depending on such factors as ice and weather conditions, abundance, etc.

The harvest levels presented in the foregoing for the commercial fishery were preliminary and represented catches up to mid-September 1983. Final catches (January 1984) for each Statistical Area as well as insular Newfoundland, Labrador and provincial totals are presented in Appendix 3. In terms of weight (small and large combined), the final figures for insular Newfoundland increased 9.9% over the preliminary; the increase for Labrador was 6.7%. Final recreational harvest levels remained virtually unchanged from the preliminary and hence are not updated in this report.

Acknowledgments

The authors wish to thank Miss Neila Caines for assistance in data compilation and analysis.

References

Chadwick, E. M. P. 1982. Recreational catch as an index of Atlantic salmon spawning escapement. Internat. Counc. Explor. Sea C.M.1982/M:43. 5 p.

Cochran, W. G. 1977. Sampling techniques. John Wiley & Sons, Inc. 428 p.

May, A. W., and W. H. Lear. 1971. Digest of Canadian Atlantic salmon catch statistics. Fish. Res. Board Can. Tech. Rep. No. 270: 106 p.

Moores, R. B., R. W. Penney, and R. J. Tucker. 1978. Atlantic salmon angled catch and effort data, Newfoundland and Labrador, 1953-77. Fish. Mar. Serv. Data Rep. No. 84, 274 p.

Moores, R. B., and R. J. Tucker. 1979. Atlantic salmon angled catch and effort data, Newfoundland and Labrador, 1978. Fish. Mar. Serv. Data Rep. 147, 106 p.

1980. Atlantic salmon angled catch and effort data, Newfoundland and Labrador, 1979. Can. Data Rep. Fish. Aquat. Sci. 212: xiv + 86 p.

Moores, R. B., A. W. Veitch, and E.G.M. Ash. (1983 in prep.). Atlantic salmon commercial catch data, Newfoundland and Labrador 1980 and 1981.

Reddin, D. G., and F. A. Day. 1980. 1969-72 Newfoundland and Labrador Atlantic salmon (Salmo salar) commercial catch data. Can. Data Rep. Fish. Aquat. Sci. 220: iv + 55 p.

Reddin, D. G., and P. B. Short. 1981. The 1976 Newfoundland and Labrador Atlantic salmon commercial landings. Can. Tech. Rep. Fish. Aquat. Sci. 1007: iv + 55 p.

Reddin, D. G., and D. E. Waldron. 1976. 1975 Newfoundland and Labrador Atlantic salmon commercial catch data. Fish. Mar. Ser. Tech. Rep. 684: 183 p.

Short P. B., and D. G. Reddin. 1981a. Newfoundland and Labrador Atlantic salmon commercial catch data - 1977. Can. Data Rep. Fish. Aquat. Sci. 282: iv + 103 p.

1981b. Newfoundland and Labrador Atlantic salmon commercial catch data - 1978. Can. Data Rep. Fish. Aquat. Sci. 283: iv + 114 p.

Waldron, D. E. 1974. 1973 Newfoundland and Labrador Atlantic salmon commercial catch data. Data Record Series No. NEW/D-74-1, Res. Dev. Branch, Nfld. Region, 127 p.

Table 1. Summary of commercial fishery statistics for all of Insular Newfoundland, 1969-83. Regressions of catch (weight and number), effort, and catch per unit effort on year are shown as well as regressions of catch in year n (small) on catch in year n+1 (large) by weight and by number and mean weight in year n (small) on mean weight in year n+1 (large).

Year	Mean wt. small (kg)	Mean wt. large (kg)	Weight (kg x 10^3)			Estimated No. (x 10^3)[a]			Effort gear units (x 10^2)	CUE
			Small	Large	Total	Small	Large	Total		
1969			403	577	980	223	116	339	146	6.7
1970			541	596	1137	299	119	418	165	6.9
1971			292	643	935	161	129	290	146	6.4
1972			367	490	857	203	98	301	108	7.9
1973			640	729	1369	354	147	501	134	10.2
1974	2.0	5.1	731	566	1297	361	116	477	171	7.6
1975	1.8	4.7	590	749	1339	314	158	472	220	6.1
1976	1.8	4.5	484	772	1256	256	172	428	202	6.2
1977	2.0	4.6	396	830	1226	195	176	371	184	6.7
1978	2.0	4.8	184	491	675	97	103	200	186	3.6
1979	2.0	4.6	391	270	661	198	77	275	184	3.6
1980	2.1	4.8	580	669	1249	280	141	421	184	6.8
1981	1.9	4.8	440	654	1094	235	137	372	176	6.2
1982	1.9	4.5	421	350	771	222	78	300	164	4.7
1983[1]	1.9	4.5	292	303	595	155	68	223	169	3.5
1969-83										
r	-	-	-0.21NS	-0.38NS	-0.36NS	-0.29NS	-0.28NS	-0.34NS	-0.43NS	-0.61*
1969-82										
$\bar{x}$	-	-	461.4	599.0	1060.4	242.7	126.2	368.9	169.3	6.4
SD	-	-	144.5	158.8	246.9	73.8	31.3	88.7	28.8	0.4
CV	-	-	31.32	26.51	23.28	30.41	24.77	24.04	16.99	6.72

Regressions:
total catch in year n (small) by weight on total catch in year n+1 (large) by weight: r = 0.60*
estimated no. small (year n) on estimated no. large (year n+1): r = 0.56*
mean wt. small (year n) on mean wt. large (year n+1): r = 0.77*

[a]Mean weight of 1.9 kg (small) and 4.5 kg (large) was used to estimate numbers of fish for 1969-73.

* = Significant ($P < 0.05$)
NS = Not significant ($P > 0.05$)

[1]Preliminary data

Table 2. Summary of commercial fishery statistics for all of Labrador, 1952-83. Regressions of catch (weight and number), effort, and catch per unit effort on year are also shown.

Year	Catch (MT)	Effort (gear unit)	CUE	No. Small	No. Large
1952	328			30176	57267
53	307			28244	53601
54	415			38180	72457
55	266			24472	46443
56	304			27968	53077
57	315			28980	54998
58	306			28152	53462
59	328	2165	0.15	30176	57267
60	230	2184	0.11	21160	40157
61	449	2015	0.22	41308	78393
62	333	2062	0.16	30636	58140
63	338	1457	0.23	31096	59013
64	466	2435	0.19	42872	81362
65	346	2367	0.15	31740	60236
66	342	1798	0.19	31454	59712
67	460	2262	0.20	42228	80139
68	348	2430	0.14	32016	60759
69	461	2208	0.21	39722	78052
70	458	3052	0.15	52712	72707
71	641	2720	0.24	68680	103605
72	537	2795	0.19	51406	89060
73	639	2976	0.22	64733	105096
74	714	2742	0.26	52161	119193
75	705	3154	0.22	104182	105360
76	756	3558	0.21	77883	129605
77	712	3408	0.21	69265	117209
78	435	3725	0.12	28421	79408
79	325	3795	0.08	48340	51961
80	853	3502	0.24	103479	124955
81	814	3450	0.24	114680	112334
82	548	3520	0.16	79449	83243
83[1]	344	3422	0.10	42982	54033
1952-83 (catch) 1959-83 (Effort & CUE) r	0.67**	0.90**	0.02NS	0.70**	0.63**
1952-66 (catch) 1959-66 (Effort & CUE) $\bar{x}$	338.2	2060.4	0.18	31107.6	59039.0
SD	62.9	315.2	0.01	5789.5	10985.9
CV	18.60	15.30	5.56	18.61	18.61

Table 2. (Cont'd)

Year	Catch (MT)	Effort (gear unit)	CUE	No. Small	No. Large
1967-82					
$\bar{x}$	587.9	3081.1	0.19	64334.8	94542.9
SD	164.0	514.2	0.01	26134.4	23381.3
CV	27.90	16.69	5.26	40.62	24.73
1952-82 (catch) 1959-82 (Effort and CUE)					
$\bar{x}$	467.1	2740.8	0.19	48257.1	77363.6
SD	177.2	666.5	0.01	25338.9	25592.2
CV	37.94	24.32	5.26	52.51	33.08

** = Significant ($P < 0.01$)
NS = Not Significant ($P > 0.05$)

[1]Preliminary data

Table 3. Summary of recreational fishery statistics for the Newfoundland Region (Insular), 1969-83. Regressions of catch, effort, and catch per unit effort on year are also shown as well as a regression of catch of small (year n) on catch of large (year n+1).

Year	No. (x 10^2)			Effort rod day (x 10^2)	CUE
	Small	Large	Total		
1969	160	3	163	401	0.41
70	153	2	155	388	0.40
71	129	2	131	383	0.34
72	125	1	126	334	0.38
73	192	2	194	460	0.42
74	154	2	156	676	0.23
75	160	2	162	601	0.27
76	164	3	167	648	0.26
77	213	12	225	689	0.33
78	197	6	203	635	0.32
79	177	4	181	499	0.36
80	233	7	240	665	0.36
81	303	5	308	777	0.40
82	259	5	264	850	0.31
83[1]	216	7	223	821	0.27
1969-83					
r	0.79**	0.60*	0.79**	0.87**	-0.33NS
1969-82					
$\bar{x}$	187.0	4.0	191.1	571.9	0.34
SD	50.5	2.9	52.2	160.9	0.02
CV	27.01	72.50	27.32	28.13	5.88

Regression:
catch of small (year n) on catch of large (year n+1): r = 0.01 NS

* =Significant ($P < 0.05$)
**=Significant ($P < 0.01$)

NS=Not Significant ($P > 0.05$)

1969-82 does not include Cinq Cerf River.

[1]Preliminary data

Table 4. Summary of recreational fishery statistics for the Newfoundland Region (Labrador), 1954-83. Regressions of catch, effort, and catch per unit effort on year are also shown.

Year	Catch (No. of fish)	Effort (rod days)	CUE	Small	Large
1954	500	100	5.00	350	150
55	133	198	0.67	125	8
56	20	101	0.20	20	0
57	1071	342	3.13	1022	49
58	869	366	2.37	849	20
59	860	500	1.72	823	37
60	597	399	1.50	558	39
61	839	634	1.32	713	126
62	822	611	1.35	764	58
63	1430	694	2.06	1372	58
64	2037	1583	1.29	1916	121
65	1780	1826	0.97	1544	236
66	2340	2280	1.03	1978	362
67	1280	1436	0.89	1085	195
68	2440	1821	1.34	2131	309
69	1732	1619	1.07	1612	120
70	2688	2750	0.98	2447	241
71	3246	2639	1.23	3007	239
72	2868	2808	1.02	2524	344
73	6638	5228	1.27	6061	577
74	2273	2779	0.82	1761	512
75	3076	2029	1.52	2903	173
76	3748	3259	1.15	3228	520
77	3625	3316	1.09	2932	693
78	2680	3814	0.70	2096	584
79	3707	3184	1.16	3217	490
80	3414	2472	1.38	2862	552
81	3800	1877	2.02	3500	300
82	3374	3121	1.08	2833	541
83[1]	2423	2904	0.83	2134	289
1954-83					
r	0.79**	0.83**	-0.38*	0.76**	0.80**
1954-66					
$\bar{x}$	1022.9	741.1	1.74	925.7	97.2
SD	700.0	699.7	0.16	625.5	103.8
CV	68.43	94.41	9.20	67.57	106.79

Table 4. Cont'd.

Year	Catch (No. of fish)	Effort (rod days)	CUE	Small	Large
1967-82					
$\bar{x}$	3161.8	2759.5	1.17	2762.4	399.4
SD	1180.7	945.9	0.07	1098.8	177.7
CV	37.34	34.28	5.98	39.77	44.49
1954-82					
$\bar{x}$	2203.0	1854.7	1.43	1939.0	263.9
SD	1459.0	1316.3	0.06	1295.6	211.9
CV	66.23	70.97	4.20	66.82	80.30

* = Significant ($P < 0.05$)
** = Significant ($P < 0.01$)

[1]Preliminary data

Table 5. Comparison of landings (number of fish) in Atlantic salmon commercial fisheries in 1983 with mean landings 1969 to 1982 for Newfoundland Region (insular and Labrador). A = Above, B = Below, C = Within 95% C.L. of mean.

Area or Section	1969 to 1982 Mean Landings		1983 Landings		1983 Landings in Relation to 95% C.L. of Mean	
	1SW	2SW	1SW	2SW	1SW	2SW
Insular						
A	63523	28565	49032	17567	B	B
B	41289	16204	29397	9769	B	B
C	13600	12984	13535	6513	C	B
D	17068	9248	5389	3695	B	B
E	9714	8821	3739	3469	B	B
F	16453	7356	4568	3397	B	B
G	3783	1455	3615	529	C	B
H	18235	3345	5959	2089	B	B
I	6079	3489	3432	1099	B	B
J_1	9571	8539	2887	1635	B	B
Labrador						
51	26505	42135	13464	18528	B	B
52	22864	28957	16483	16020	C	B
53	10351	16030	9917	13368	C	C

Table 6. Comparison of catch (number of fish) in Atlantic salmon recreational fisheries in 1983 with mean landings 1969 to 1982 for Newfoundland Region (insular and Labrador). Expectation for future stock abundance is shown in relation to recreational catch which is used as an index of spawning escapement. A = Above, B = Below, C = Within 95% C.L. of mean.

Area or Section	1969 to 1982 Mean Catch		1983 Catch		1983 Catch in Relation to 95% C.L. of Mean		Expectation for Future Stock Abundance					
							1984		1985		1986-90	
	1SW	2SW	1SW	2SW	1SW	2SW	1SW	2SW	1SW	2SW	1SW	2SW
Insular												
A	1362	15	1617	2	C	C	C	B	C	C	C	C
B	7066	269	8939	297	A	C	C	B	C	C	C	C
C	2390	32	2357	170	C	A	B	C	C	B	C	C
D	244	7	296	10	C	C	C	B	C	C	C	C
E	84	1	139	34	A	A	C	B	C	C	C	C
F	63	2	41	5	B	C	C	B	C	C	C	C
G	1670	20	2303	71	A	A	C	C	C	C	C	C
H	1063	17	1140	79	C	A	B	B	C	B	C	C
I	1760	13	1364	3	B	B	C	B	C	C	C	C
J_1	2487	26	2776	22	C	C	B	B	C	B	C	C
Labrador												
51	164	13	326	18	C	C	B	C	B	B	C	C
52	2255	169	1340	135	B	C	B	B	B	B	C	C
53	506	239	468	136	C	B	C	C	C	C	C	C

Table 7. Counts of grilse from fishways in insular Newfoundland 1955-83; also shown are correlation coefficients (r), means ($\bar{x}$), standard deviations (SD) and coefficients of variation (CV).

	Fishways									
	1	2A	2B	3	4	5	6	7	8	9
1955							77			
1956					380[a]	594	76			
1957				965	30[a]	182	22			
1958	923			1574	563[a]	872	10			
1959	456	1005[a]	-	881	308[a]	461	140			
1960	519	1170	103	474		707	86			
1961	154	957	372	56		417	75		12	
1962	-	-	1068			771	288		49	
1963	289	1267	528			871	407		31	
1964	1244	-	1868			716	264		26	
1965	394	1431	777			728	385		22	
1966	295	1335[a]	1412			588	136		2	40
1967	116	2082	1204			972	415		0	51
1968	682	-	2021			1089	437	68[a]	5	30
1969	225	1477	1182			1051	599		0	23
1970	392	-	1222			1224	733			38
1971	364	1261	1163	1208		857	437	180	6	55
1972	112	907	729[a]	594	848	957	532	270	45	60
1973	717	294	-	1105	1088[a]	754	562	463[a]	218	107
1974	624	2994	-	870	847[a]		283	233	74	41
1975	799	10451	6556		1128[a]		830	222[a]	1	216
1976	356	4599	3158				383	350	144	388
1977	1330	6642	4515				633		203	822
1978	1138	4059	2711	807	1428	830	524	422	129	989
1979	3072	6969	4042	410	1337[a]	739	485	491	196	2023
1980	1785	-	4968	1012	1794	882	437	467	320	849
1981	2847[a]	10710	4800	2492	2453	1205	647	396[a]	160	2199
1982	2216	7787	2959	1443	1301	983	633	122[a]	291	2635
1983	2253[a]	-	3254	993	1269	1267	892[a]	255	-	-

Table 7. Cont'd.

	Fishways									
	1	2A	2B	3	4	5	6	7	8	9
1955-83										
r	0.67**	0.75**	0.77**	0.30NS	0.85**	0.64**	0.82**	0.37NS	0.77**	0.83**
1955-82										
$\bar{x}$	877.0	3547.2	2255.1	992.2	1038.8	802.2	376.3	307.0	92.1	621.5
SD	833.2	3354.2	1798.2	592.0	656.7	248.4	231.8	144.1	102.8	862.5
CV	95.01	94.56	79.74	59.67	63.22	30.96	61.60	46.94	111.62	138.78

** = Significant ($P < 0.01$)
NS = Not significant ($P > 0.05$)

1 Indian Brook

2 Exploits River
(a) Bishop's Falls
(b) Gt. Rattling Brook

3 Gander River

4 Middle Brook

5 L. Terra Nova River

6 U. Terra Nova River

7 Northeast River (Placentia)

8 Lomond River

9 Torrent River

[a] Partial Counts

Table 8. Counts of large salmon at fishways in insular Newfoundland 1955-83; also shown are correlation coefficients (r), means ($\bar{x}$), standard deviations (SD) and coefficients of variation (CV).

	Fishways									
	1	2A	2B	3	4	5	6	7	8	9
1955							24			
1956					56[a]	36	44			
1957				323	2[a]	41	1			
1958	80			502	231[a]	195	0			
1959	18	119[a]	-	290	13[a]	67	20			
1960	25	157	9	183		217	0			
1961	1	118	53	15		99	1		2	
1962	-	-	31			275	4		5	
1963	22	65	37			320	35		3	
1964	45	-	116			297	18		1	
1965	0	203	190			254	51		4	
1966	3	506[a]	470			220	2		1	0
1967	0	710	382			359	42		0	2
1968	0	-	687			374	28	11[a]	1	1
1969	3	498	290			393	136		0	5
1970	0	-	199			470	170		-	2
1971	0	300	261	494		277	121	21	0	4
1972	0	113	234	53	10	348	202	34	14	3
1973	3	89	-	135	9[a]	299	222	64[a]	110	12
1974	8	411	-	8	77[a]		122	9	33	3
1975	11	1441	544		9[a]		48	36[a]	0	25
1976	3	493	121				37	56	11	47
1977	23	584	221				262		11	33
1978	13	302	78	52	16	20	88	32	12	21
1979	113	276	119	6	54[a]	170	30	37	1	39
1980	25	-	418	15	91	40	15	34	19	61
1981	151	1695	514	33	38	90	28	62[a]	50	97
1982	67	133	123	18	20	19	8	36[a]	16	523
1983	48[a]	-	223	12	74	57	76[a]	22	-	-

Table 8. Cont'd.

	Fishways									
	1	2A	2B	3	4	5	6	7	8	9
1955-83 r	0.33NS	0.42NS	0.25NS	-0.65**	-0.20NS	-0.16NS	0.35NS	0.29NS	0.33NS	0.56*
1955-82										
$\bar{x}$	25.6	432.3	242.7	151.9	48.2	212.2	62.8	36.0	14.0	51.6
SD	39.4	444.3	191.9	179.9	61.9	137.6	74.1	17.7	25.3	124.4
CV	153.91	102.78	79.06	118.43	128.42	64.84	117.99	49.17	180.71	241.08

* = Significant ($P < 0.05$)
** = Significant ($P < 0.01$)
NS = Not significant ($P > 0.05$)

1 Indian Brook

2 Exploits River
(a) Bishop's Falls
(b) Gt. Rattling Brook

3 Gander River

4 Middle Brook

5 L. Terra Nova River

6 U. Terra Nova River

7 Northeast River (Placentia)

8 Lomond River

9 Torrent River

[a] Partial Counts

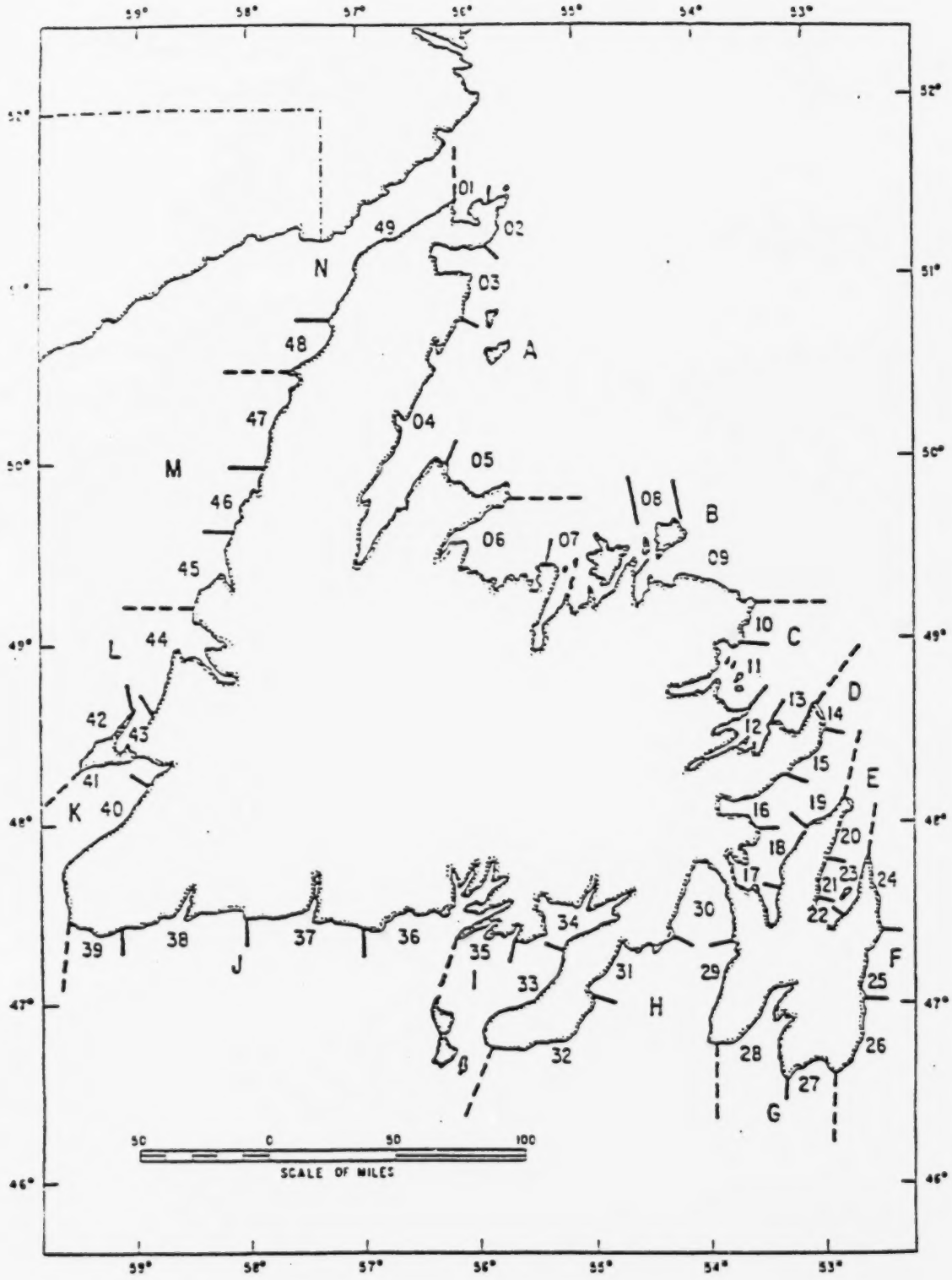

Fig. 1. Boundaries of Statistical Sections (numerically indicated) and Statistical Areas (alphabetical) in insular Newfoundland.

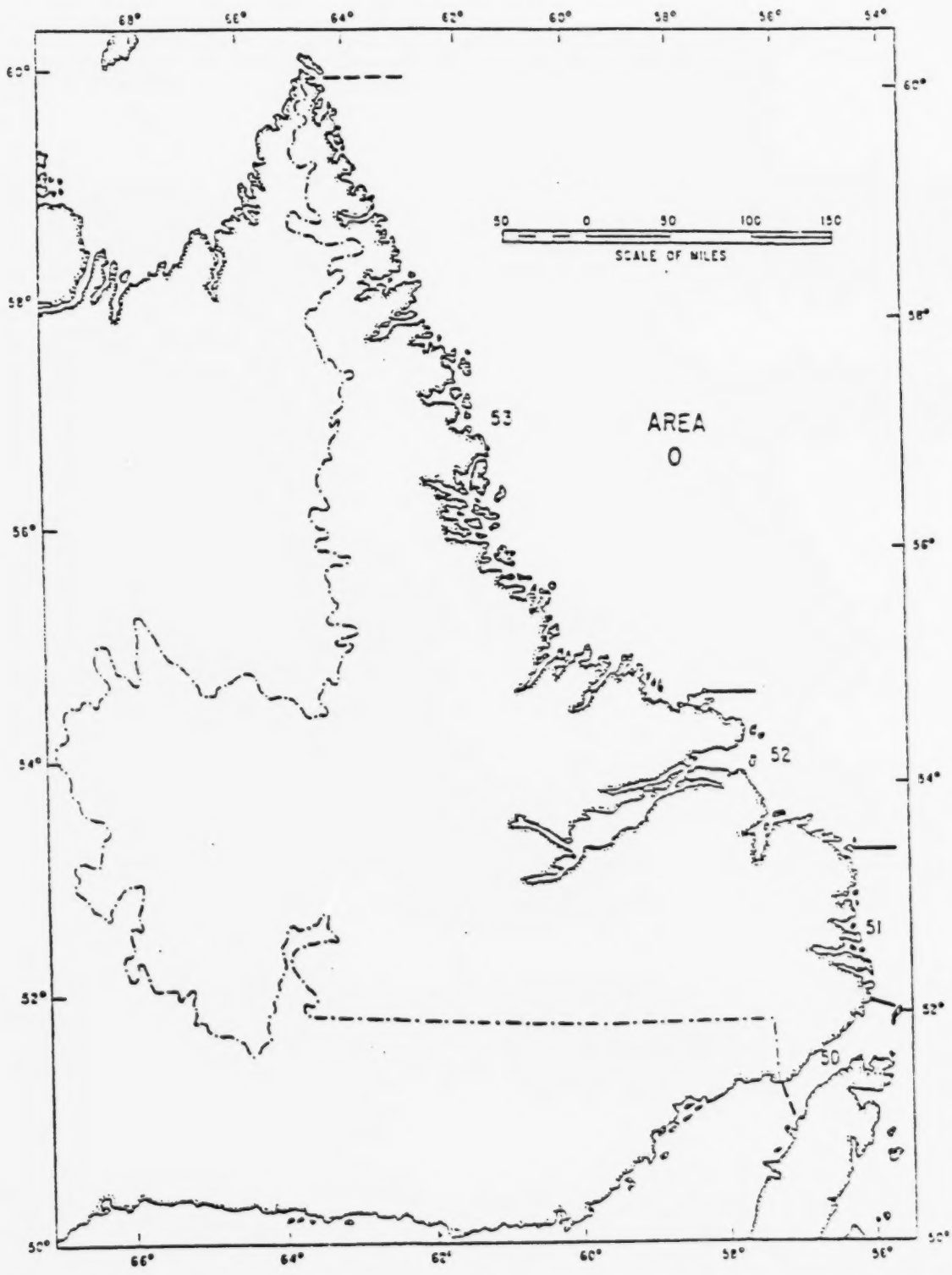

Fig. 2. Boundaries of Statistical Sections (numerically indicated) and Statistical Area 0 in Labrador.

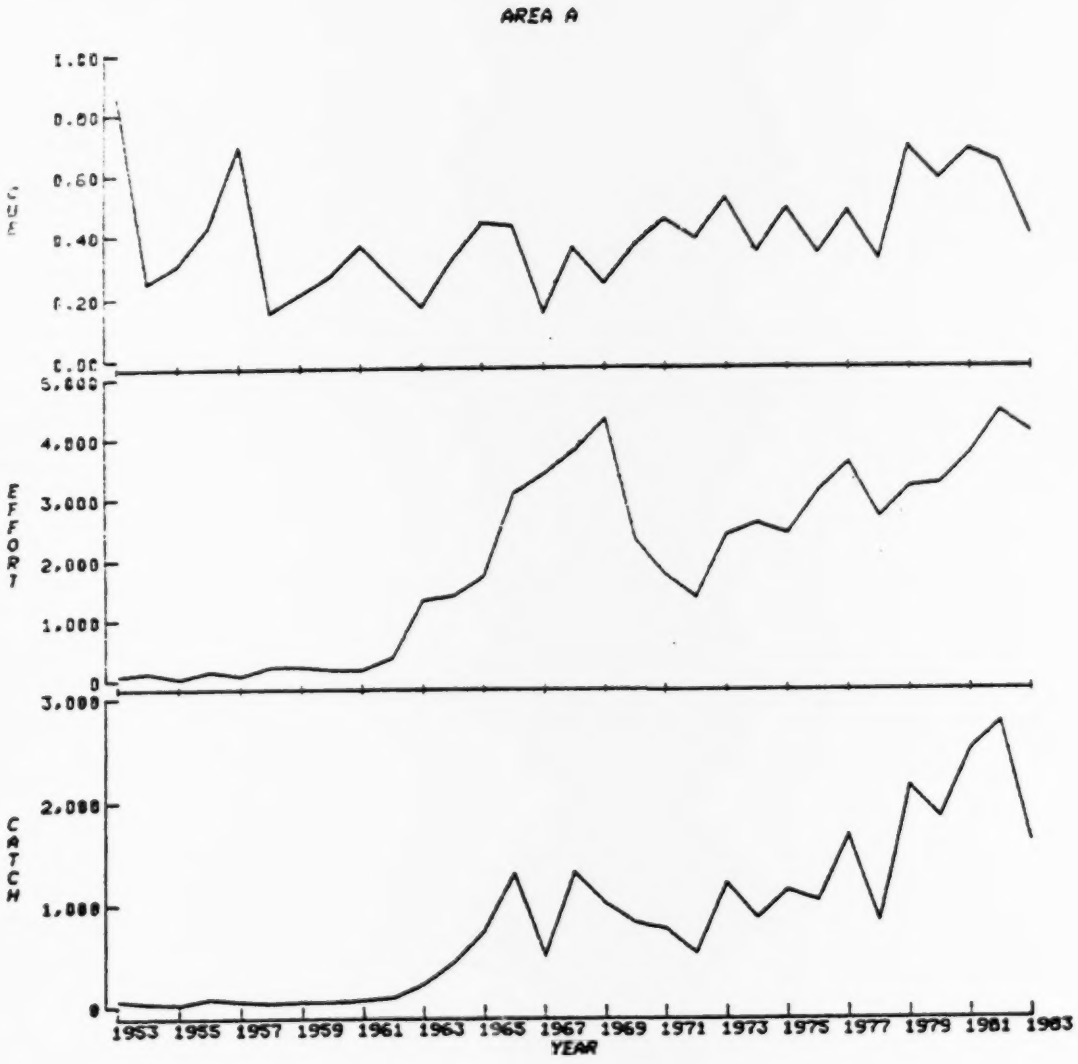

Fig. 3. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area A, 1953-83.

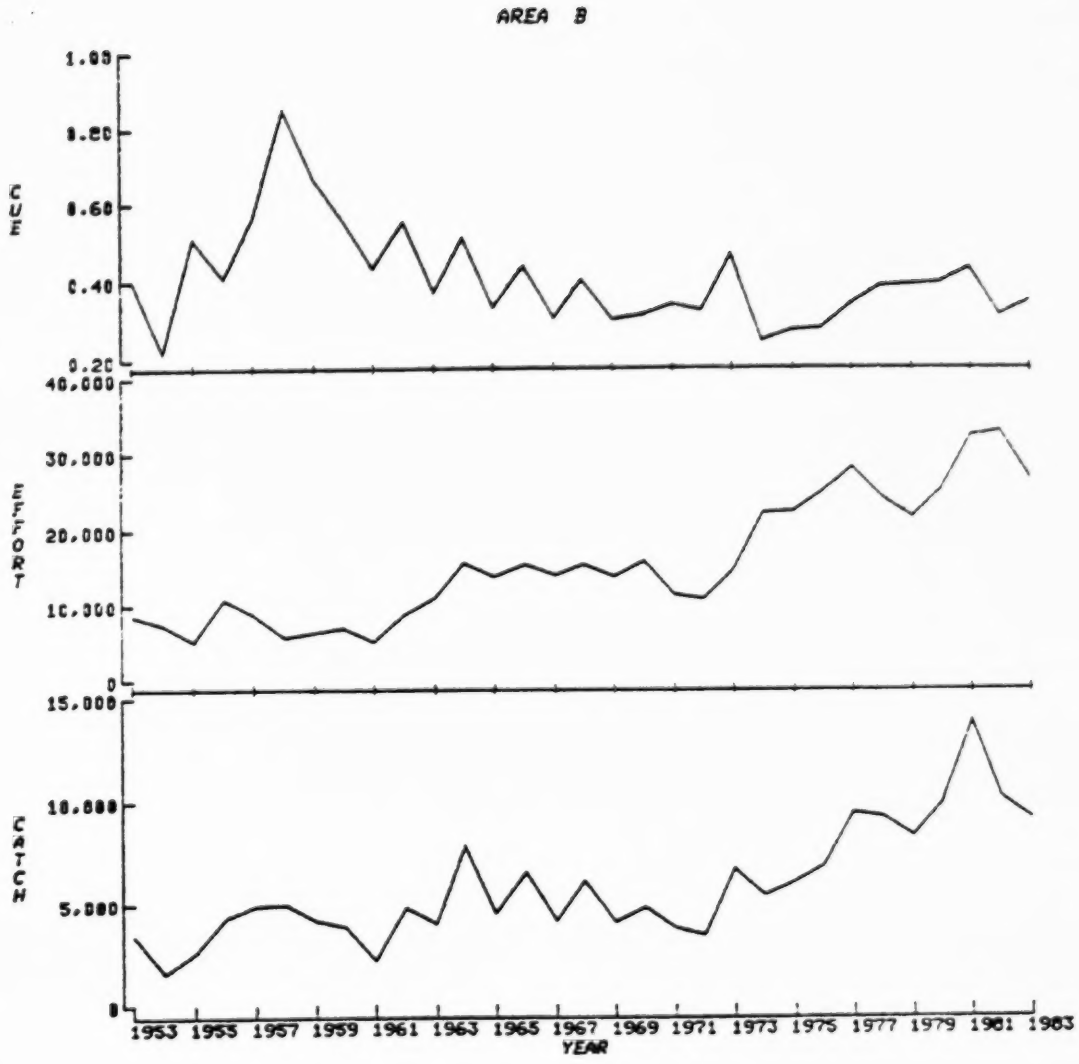

Fig. 4. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area B, 1953-83.

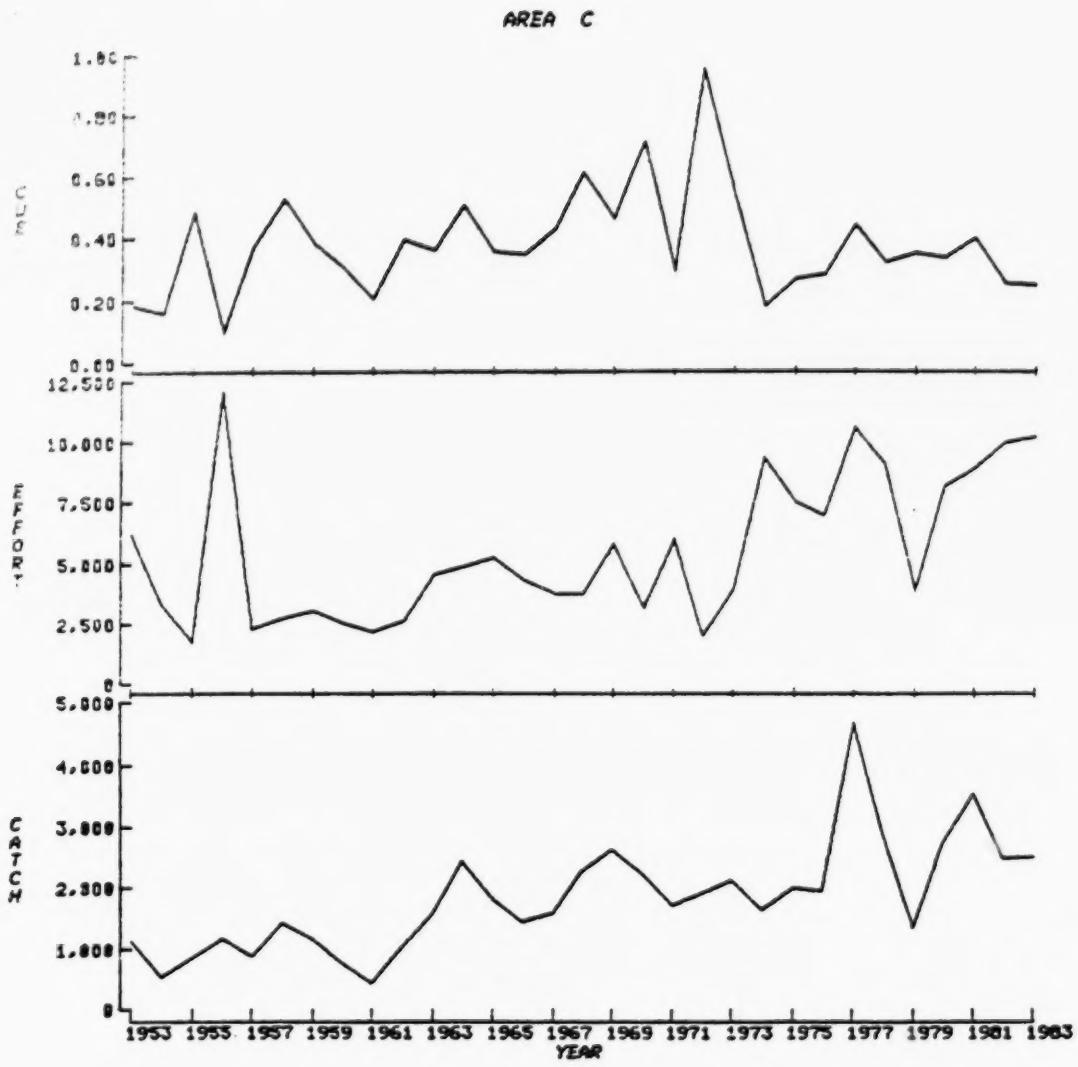

Fig. 5. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area C, 1953-83.

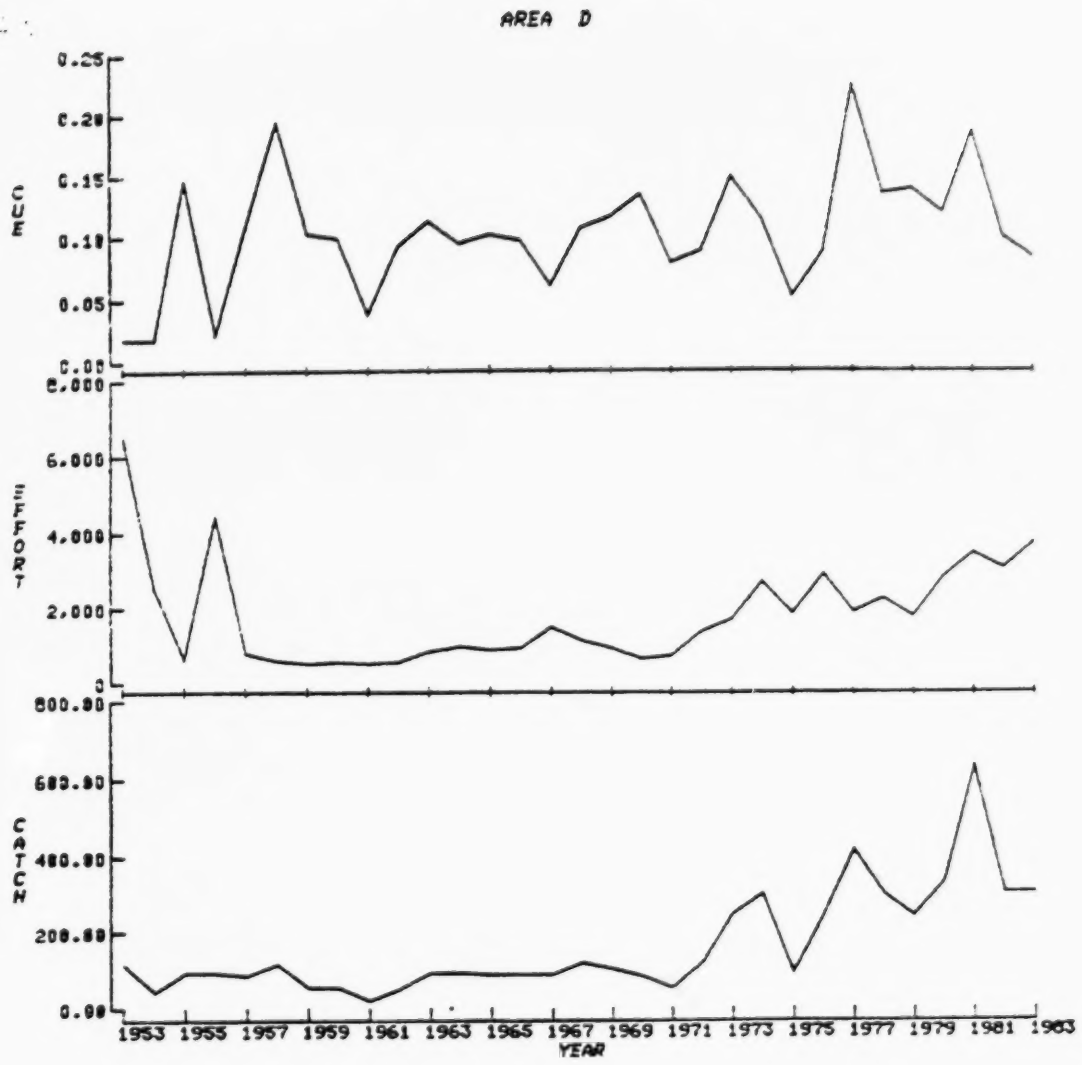

Fig. 6. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area D, 1953-83.

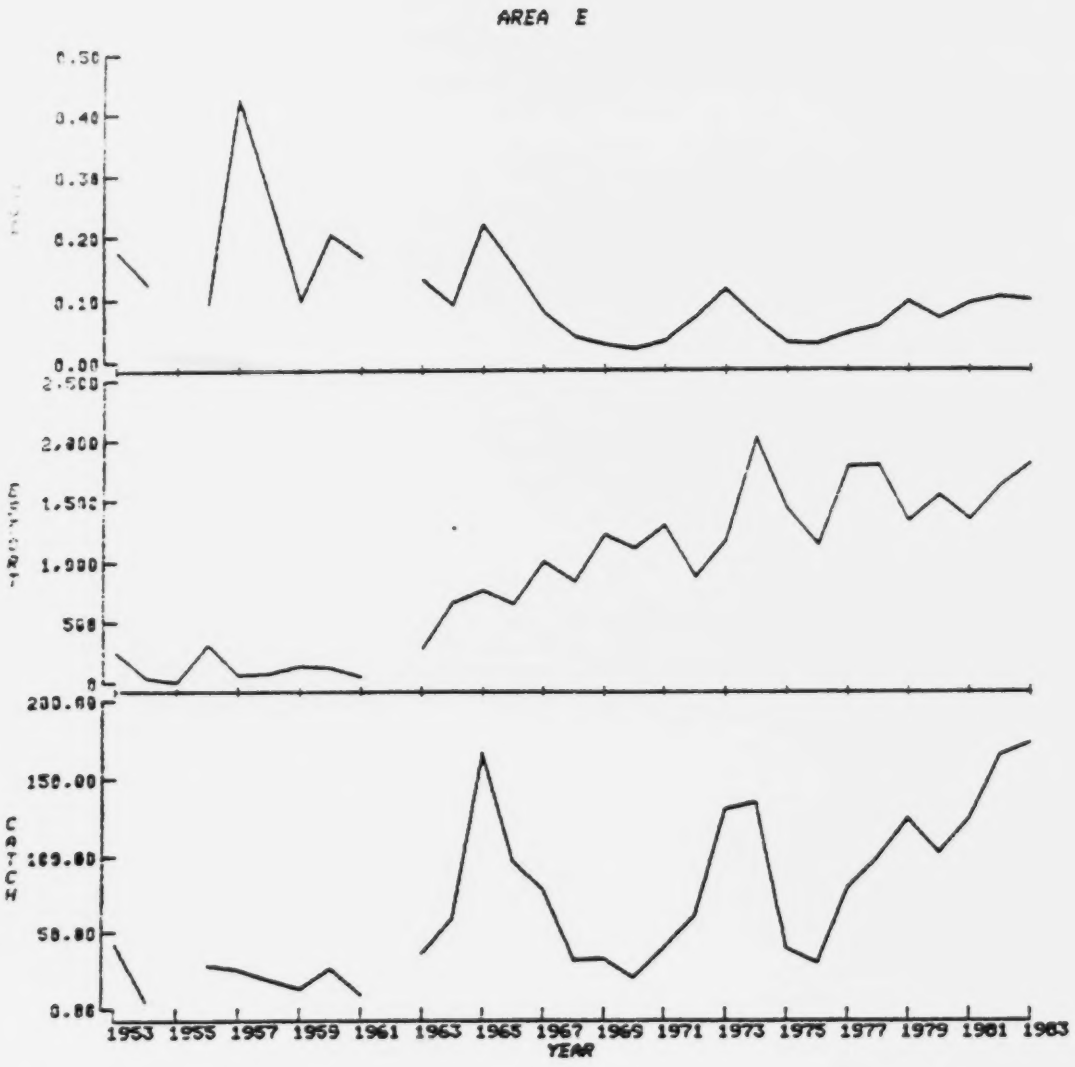

Fig. 7. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area E, 1953-83.

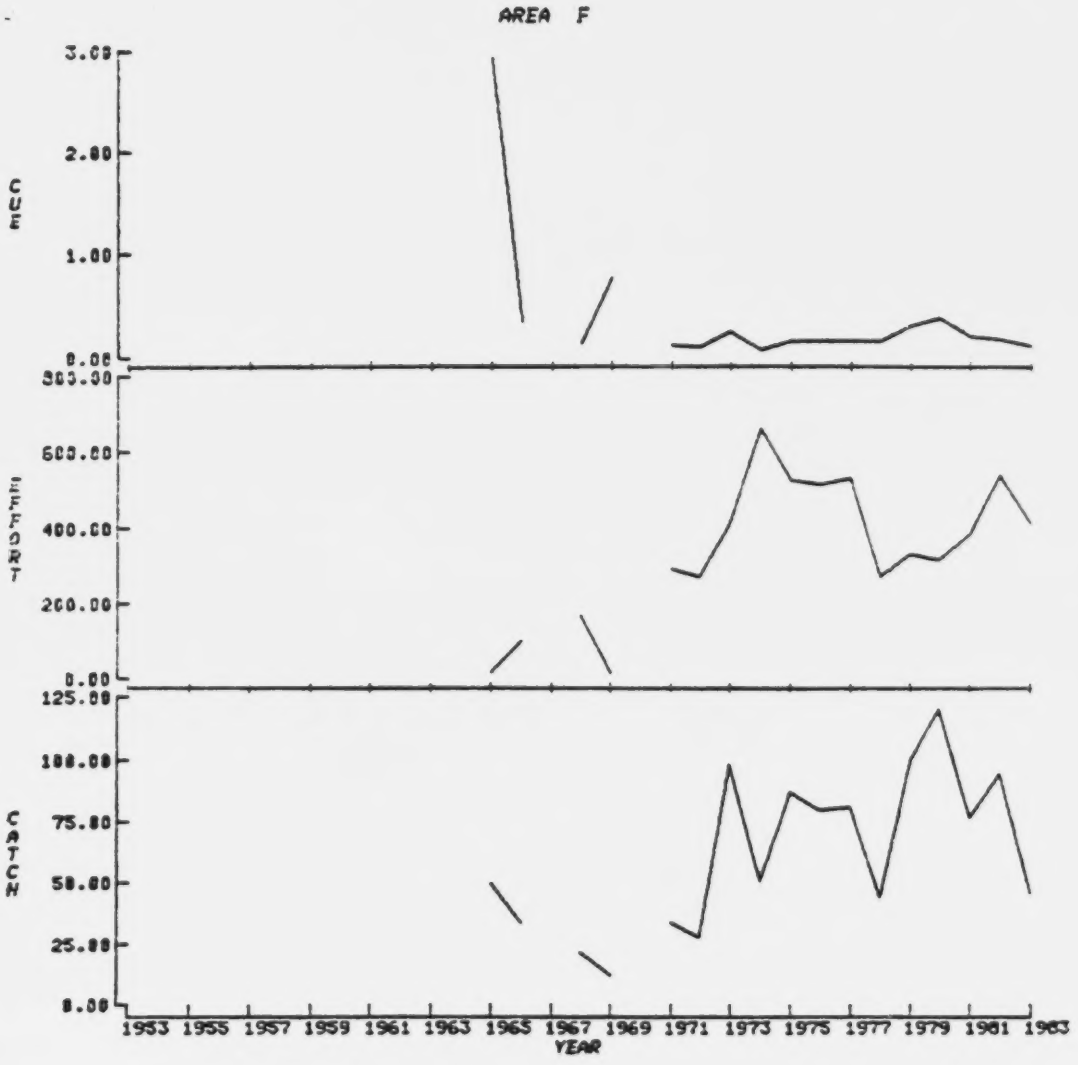

Fig. 8. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area F, 1953-83.

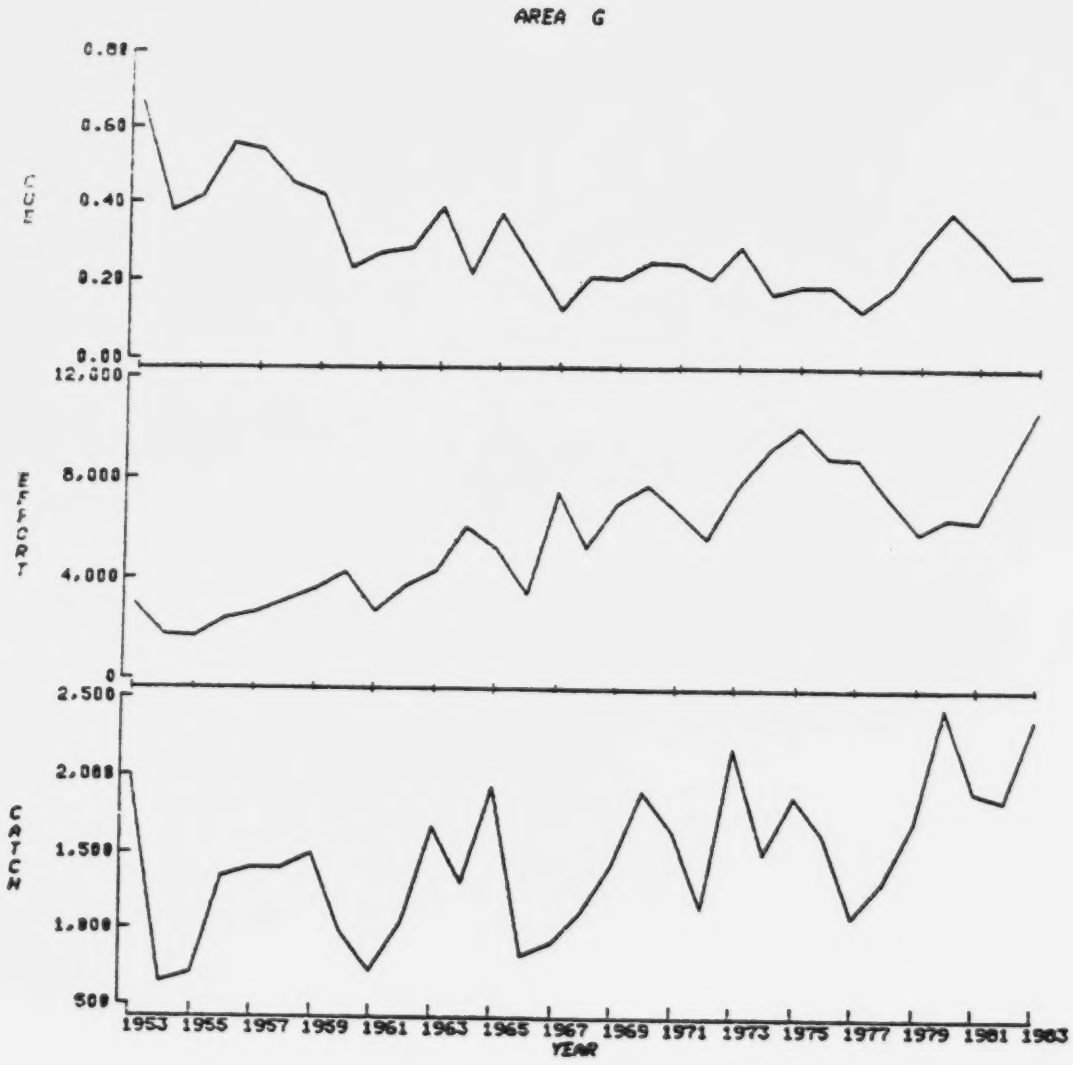

Fig. 9. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area G, 1953-83.

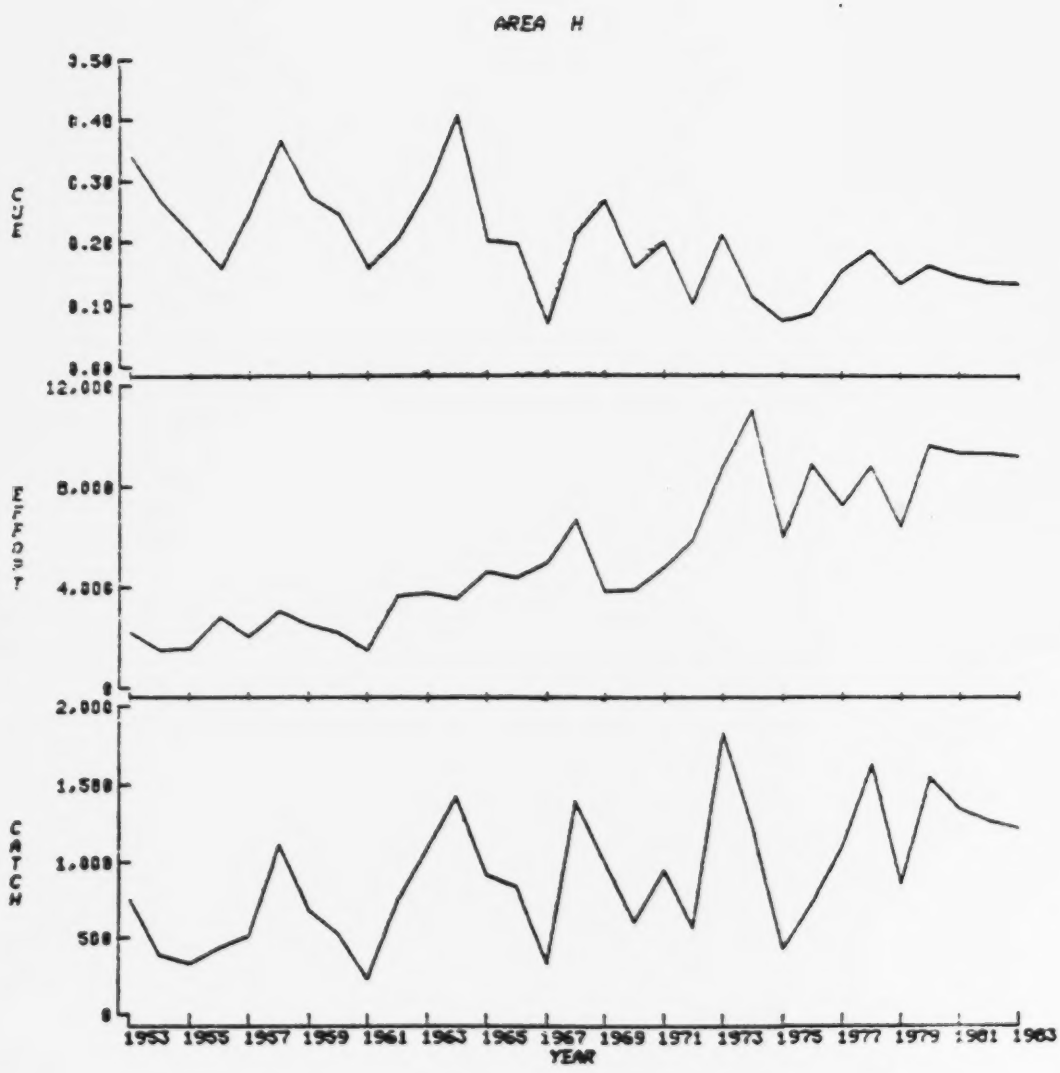

Fig. 10. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area H, 1953-83.

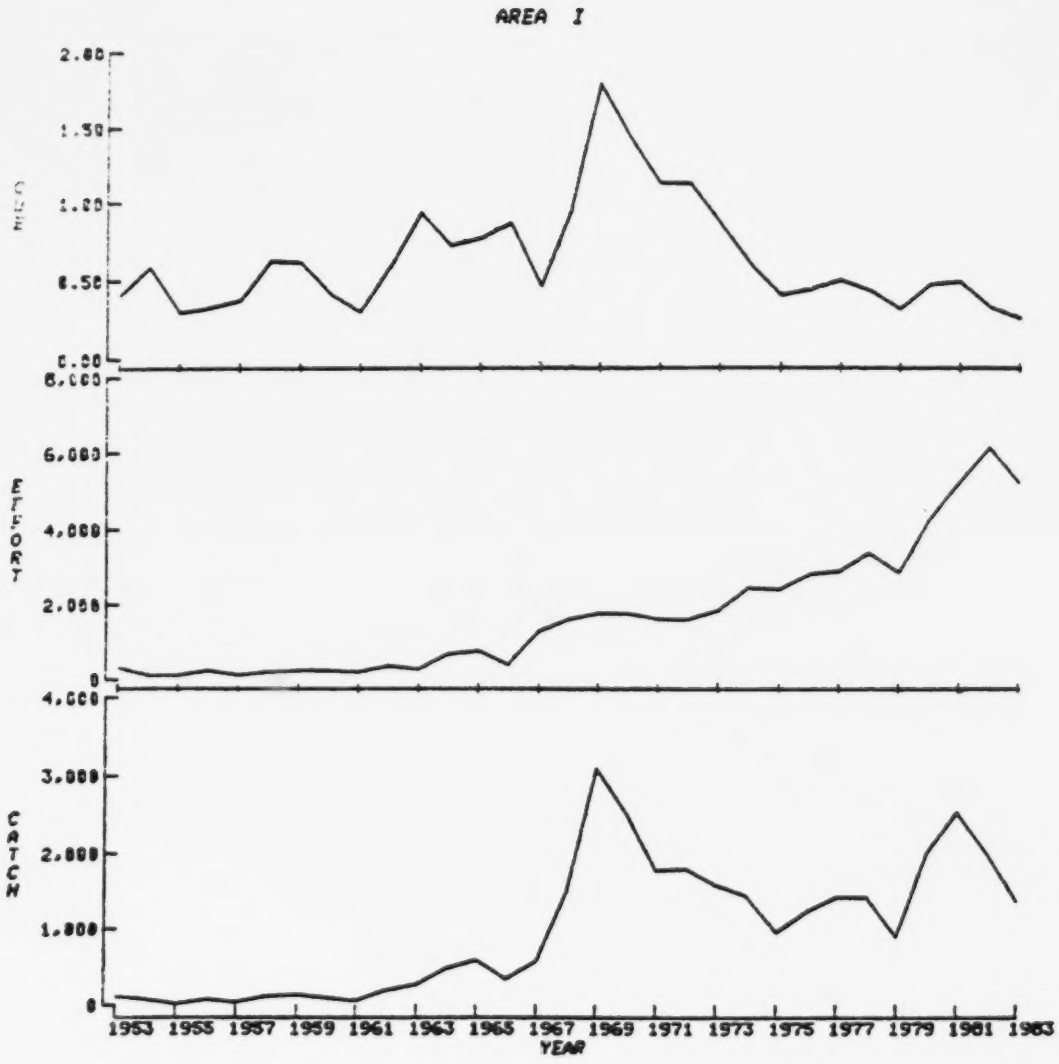

Fig. 11. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area I, 1953-83.

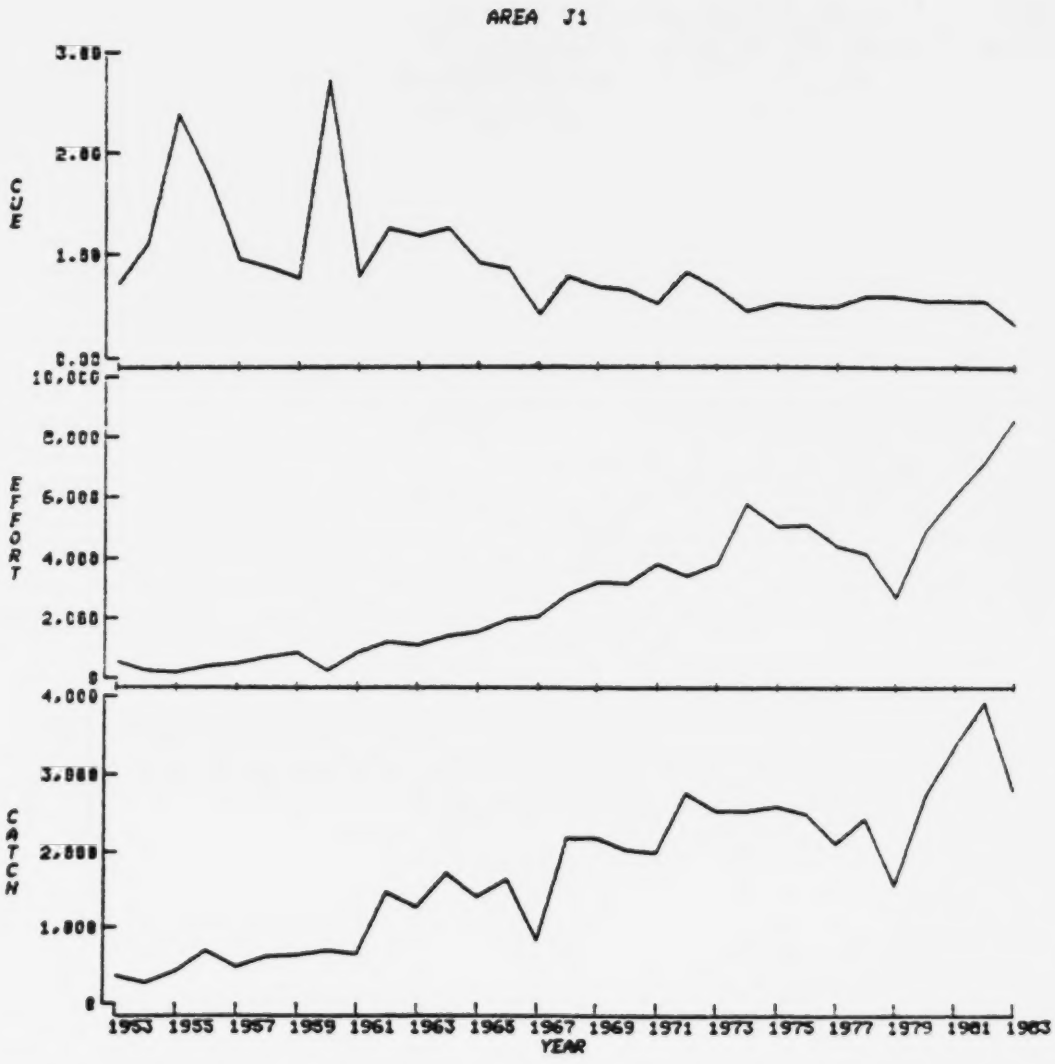

Fig. 12. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area J1, 1953-83.

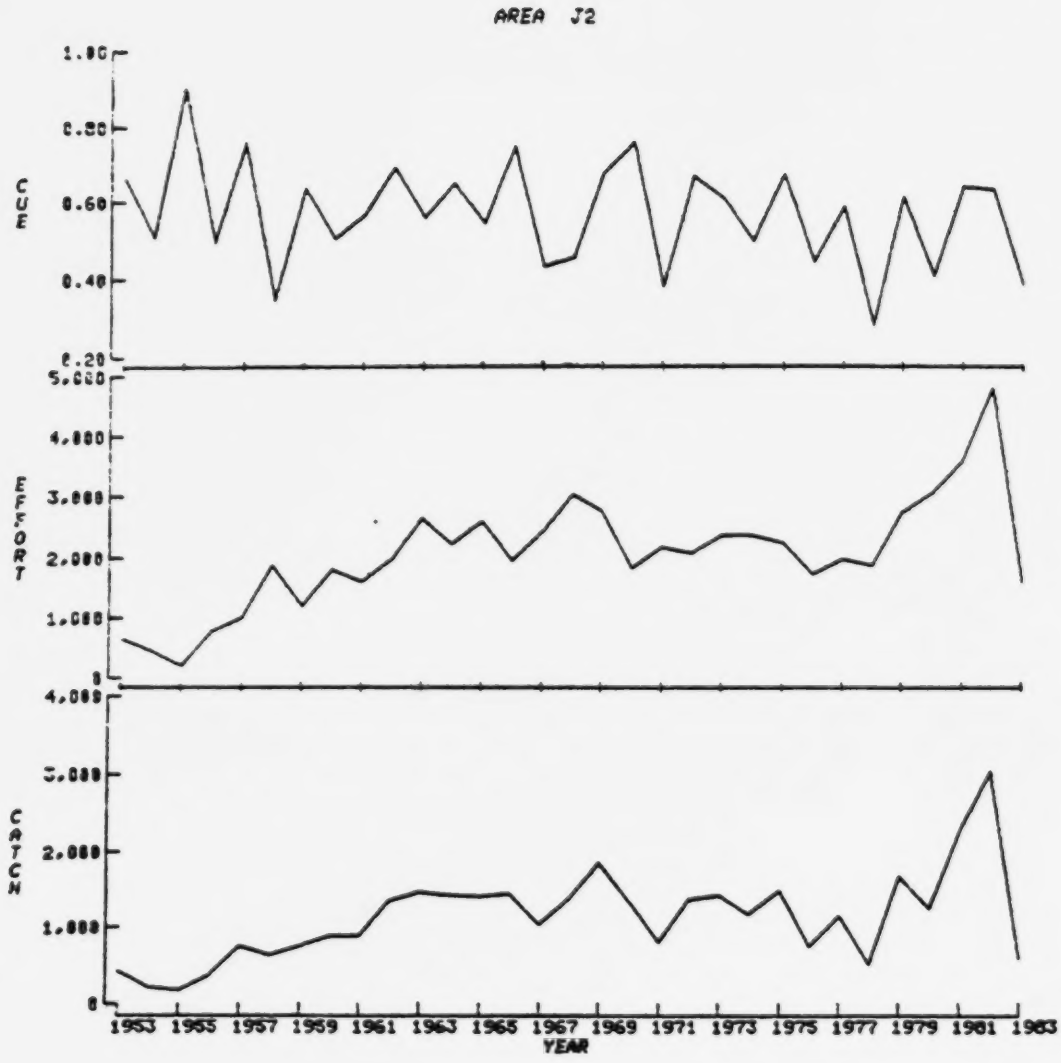

Fig. 13. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area J2, 1953-83.

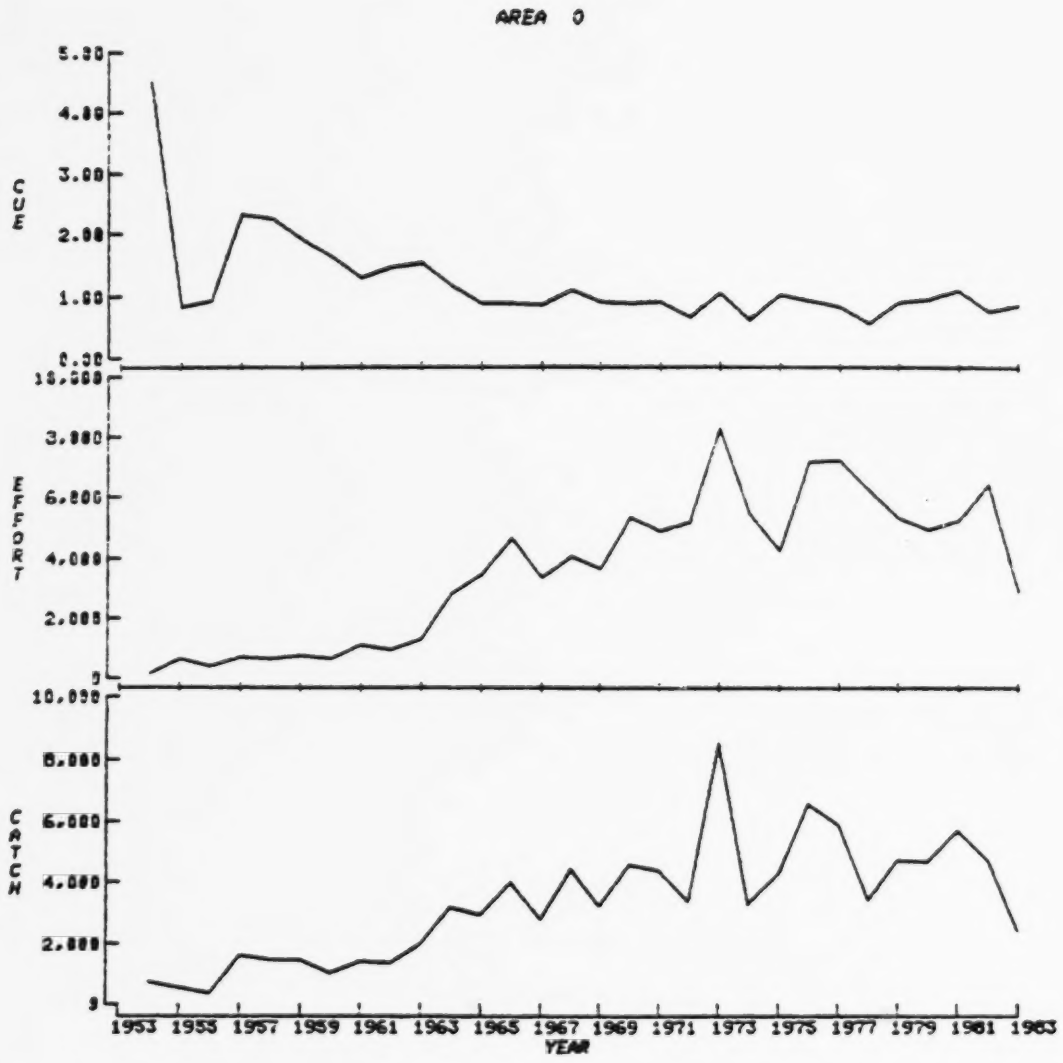

Fig. 14. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Statistical Area 0, 1953-83.

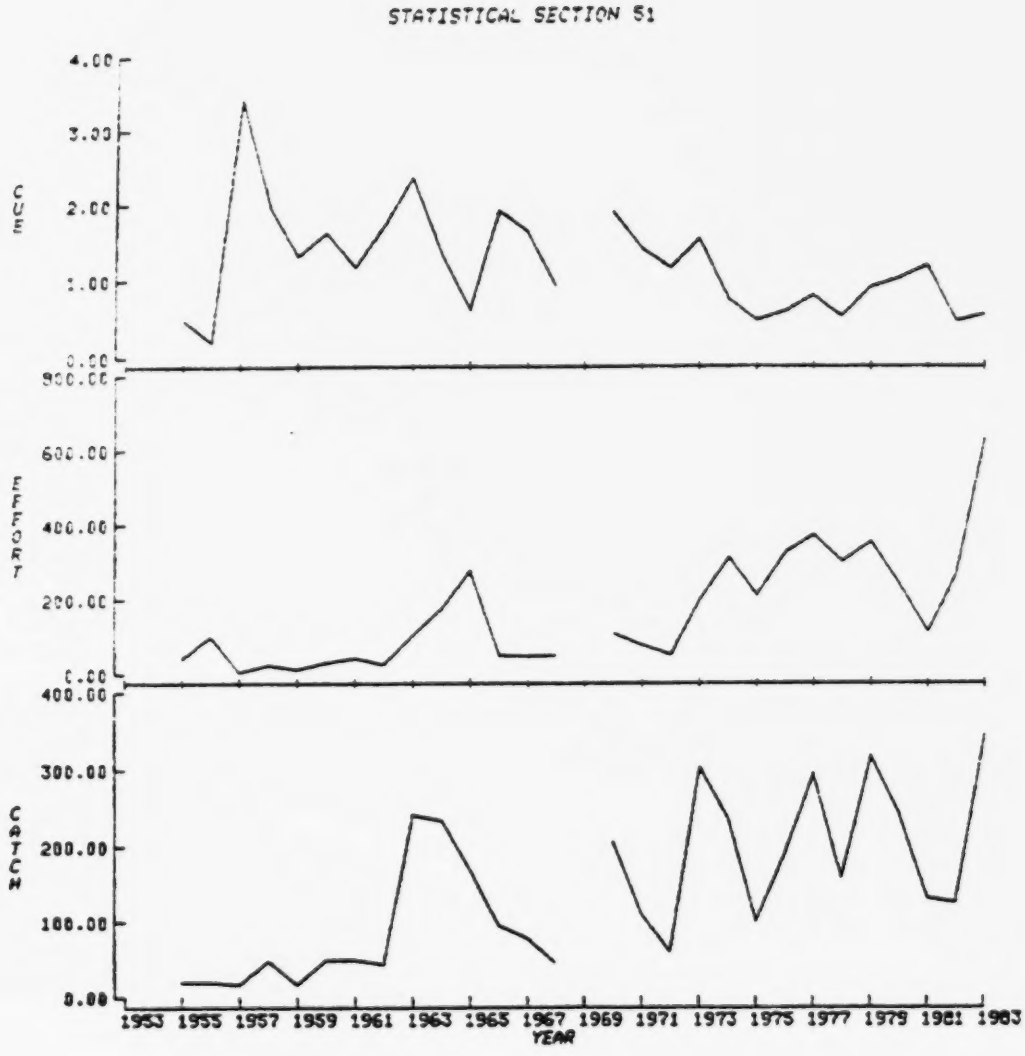

Fig. 15. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Section 51, Statistical Area O, 1955-83.

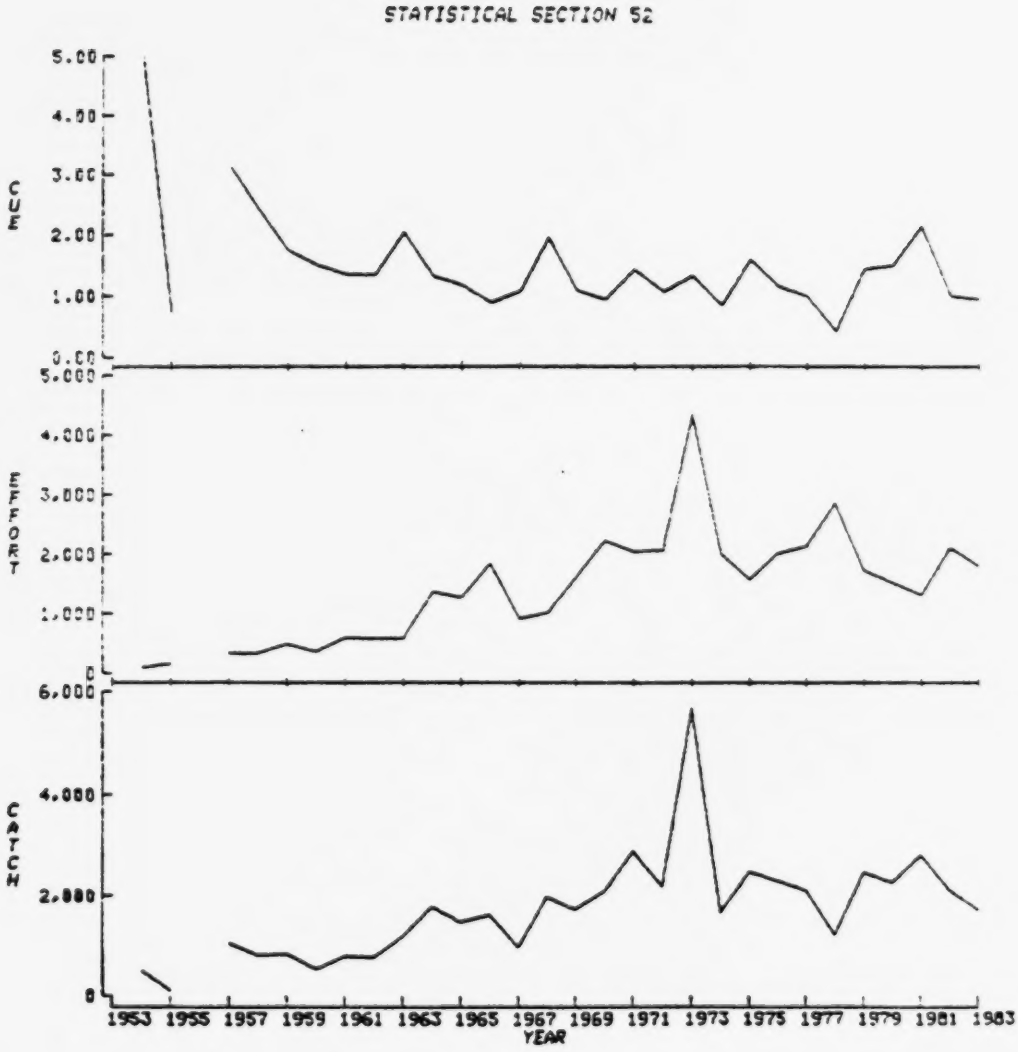

Fig. 16. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Section 52, Statistical Area 0, 1954-83.

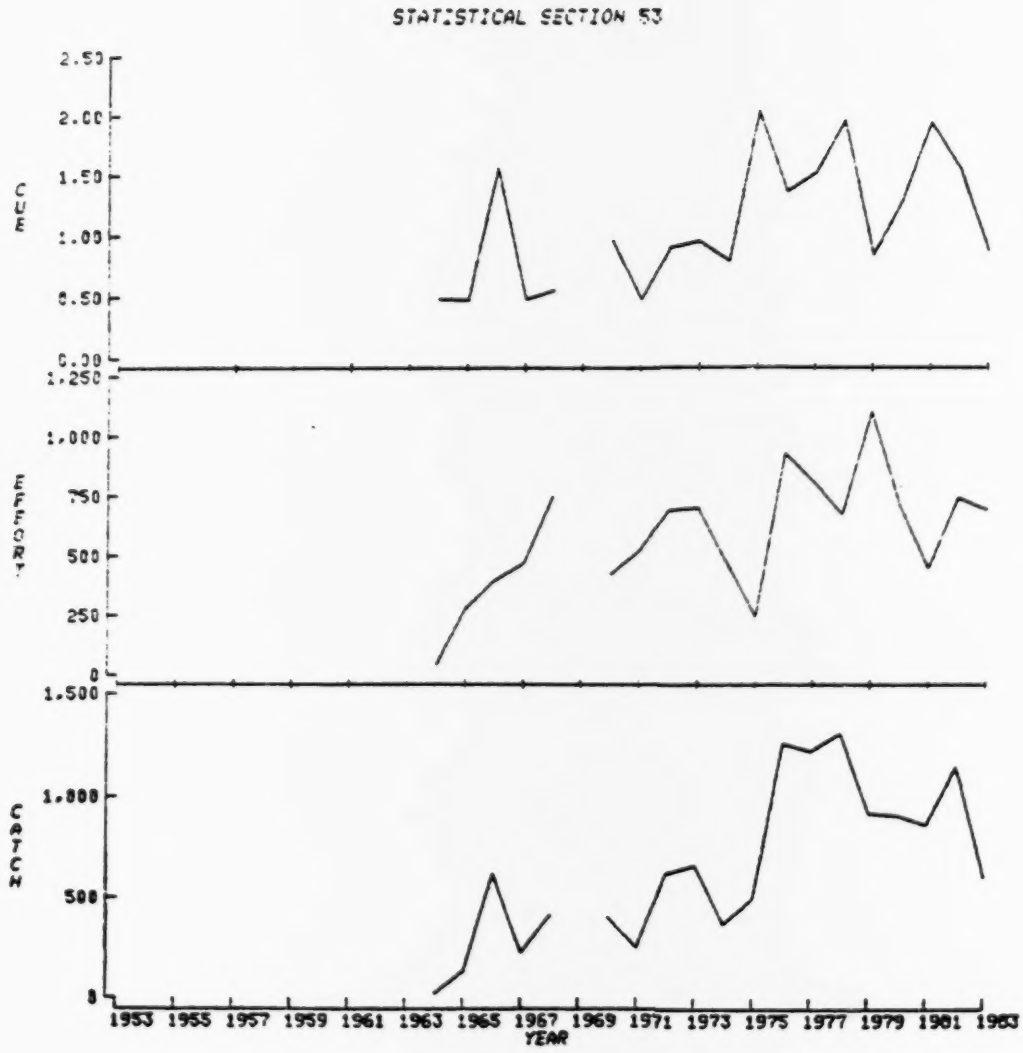

Fig. 17. Plot of catch, effort, and catch per unit effort values for the recreational Atlantic salmon fishery for Section 53, Statistical Area O, 1964-83.

Appendix 1a. Summary of commercial Atlantic salmon catch and effort data for Statistical Area A, 1969-83. Weight in metric tonnes.

STATISTICAL AREA: A

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	2746	90	49669	100	20086	190	69754	0.07	47.37	71.21
1970	3258	127	70020	114	22889	241	92910	0.07	52.70	75.36
1971	2695	81	44726	181	36251	262	80977	0.10	30.92	55.23
1972	1525	61	33512	139	27891	200	61403	0.13	30.50	54.58
1973	2155	150	83298	181	36612	332	119910	0.15	45.18	69.47
1974	2430	65	31770	86	17340	151	49110	0.06	43.05	64.69
1975	2818	122	62708	120	25961	242	88669	0.09	50.41	70.72
1976	2639	171	87513	174	40375	345	127888	0.13	49.57	68.43
1977	2473	122	62650	242	51427	365	114077	0.15	33.42	54.92
1978	2516	50	25005	85	17604	135	42609	0.05	37.04	58.68
1979	2515	210	104952	62	14796	272	119748	0.11	77.21	87.64
1980	2480	167	80078	166	34853	334	114931	0.13	50.00	69.67
1981	2411	175	93998	177	36479	351	130477	0.15	49.86	72.04
1982	2362	112	59428	80	17340	192	76768	0.08	58.33	77.41
1983	2478	89	49032	80	17567	170	66599	0.07	52.35	73.62
MEANS AND STANDARD DEVIATIONS:										
MEAN:	2501.64	121.64	63523.36	136.21	28564.57	258.00	92087.93	* 0.10	*47.15	*68.98
S.D.:	381.96	48.63	24626.35	51.94	10958.74	77.76	29620.67	* 0.01	* 3.32	*10.95

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE: 1983 EXCLUDED).

Appendix 1b. Summary of commercial Atlantic salmon catch and effort data for statistical [illegible] tonnes.

STATISTICAL AREA: B

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	2896	62	34255	43	8595	105	42850	0.04	59.05	79.94
1970	3648	108	59553	65	13080	173	72633	0.05	62.43	81.99
1971	2395	48	26276	112	22506	160	48782	0.07	30.00	53.86
1972	1694	37	20685	57	11299	94	31984	0.06	39.36	64.67
1973	2499	69	38440	46	9360	116	47800	0.05	59.48	80.42
1974	3151	62	32607	43	9161	105	41768	0.03	59.05	78.07
1975	3962	165	88752	81	20595	246	109307	0.06	67.07	81.20
1976	3547	62	33252	56	12775	117	46027	0.03	52.99	72.24
1977	3327	86	44206	94	19656	181	63862	0.05	47.51	69.22
1978	3371	28	13856	76	15914	104	29770	0.03	26.92	46.54
1979	5349	57	27253	21	17277	78	44530	0.02	73.08	61.20
1980	3485	135	64024	110	24029	245	88053	0.07	55.10	72.71
1981	5390	87	44106	128	26632	215	70738	0.06	40.47	62.35
1982	3233	97	50764	69	16022	166	66786	0.05	58.43	76.01
1983	3753	59	29397	44	9769	103	39166	0.03	57.28	75.06
MEANS AND STANDARD DEVIATIONS:										
MEAN:	3139.07	78.79	41287.79	71.50	16204.36	150.36	57492.14	* 0.05	*52.40	*71.81
S.D.:	590.83	37.81	19624.30	30.70	5829.12	56.19	22361.52	* 0.00	* 3.50	*10.75

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1c. Summary of commercial Atlantic salmon catch and effort data for Statistical Area C, 1969-83. Weight in metric tonnes.

STATISTICAL AREA: C

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	1408	25	13671	41	8210	66	21881	0.05	37.88	62.48
1970	1615	41	22748	76	15278	117	38026	0.07	35.04	59.82
1971	1519	14	7708	82	16499	96	24207	0.06	14.58	31.84
1972	1116	23	12487	30	5939	52	18425	0.05	44.23	67.77
1973	1577	30	16852	126	25386	157	42238	0.10	19.11	39.90
1974	2014	29	15253	37	7025	65	20278	0.03	44.62	65.36
1975	2565	48	22319	112	23548	160	45867	0.06	30.00	48.66
1976	2354	6	2933	51	12333	57	15266	0.02	10.53	19.21
1977	2163	34	16077	94	19461	128	35538	0.06	26.56	45.24
1978	2172	16	8433	53	11629	70	20062	0.03	22.86	42.03
1979	2169	7	2815	21	5410	28	8225	0.01	25.00	34.22
1980	2520	40	18246	47	10609	87	28855	0.04	45.98	63.23
1981	1944	28	14252	65	14366	93	28618	0.05	30.11	49.80
1982	1706	57	18607	25	6089	80	24696	0.04	61.67	75.34
1983	1669	27	13535	28	6513	56	20048	0.03	48.21	67.51
MEANS AND STANDARD DEVIATIONS:										
MEAN:	1905.00	27.00	13600.07	61.29	12984.43	88.29	26584.43	* 0.05	*30.58	*51.16
S.D.:	418.80	12.77	6502.49	52.74	6490.39	59.66	10679.33	* 0.01	* 5.21	* 8.97

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 11. Summary of commercial Atlantic salmon catch and effort [illegible].

STATISTICAL AREA: D

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	900	27	14919	32	6416	59	21335	0.07	45.76	69.93
1970	1220	36	19735	42	8359	77	28094	0.06	46.75	70.25
1971	996	19	10167	52	10451	71	20618	0.07	26.76	49.31
1972	731	32	17792	30	5870	61	23662	0.08	52.46	75.19
1973	1158	31	17011	62	12481	93	29492	0.08	33.33	57.68
1974	1589	87	45675	82	17857	169	63510	0.11	51.48	71.91
1975	2074	44	24735	62	12639	106	37372	0.05	41.51	66.18
1976	2074	18	9700	36	7593	54	17293	0.03	33.33	56.09
1977	1876	38	16678	52	10725	90	27403	0.05	42.22	60.86
1978	1901	19	9955	57	10967	76	20922	0.04	25.00	47.58
1979	1853	22	13168	7	4580	29	17748	0.02	75.86	74.19
1980	1834	29	14568	35	6919	64	21487	0.03	45.31	67.80
1981	1709	23	12843	50	10356	73	23199	0.04	31.51	55.36
1982	1630	25	12006	20	4278	45	16284	0.03	55.49	73.73
1983	1511	10	5389	17	3695	26	9084	0.02	38.46	59.32
MEANS AND STANDARD DEVIATIONS:										
MEAN:	1538.93	32.00	17067.71	44.21	9247.93	76.07	26315.64	* 0.05	*42.07	*64.86
S.D.:	451.09	17.65	9227.26	19.33	3704.56	33.41	12095.70	* 0.01	* 2.87	*11.42

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1e. Summary of commercial Atlantic salmon catch and effort data for Statistical Area E, 1969-83. Weight in metric tonnes.

STATISTICAL AREA: E

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	1107	22	12488	25	4786	46	17274	0.04	47.83	72.29
1970	1447	50	16788	56	7129	66	23917	0.05	45.45	70.19
1971	1605	3	1546	49	9864	52	11210	0.03	5.77	12.01
1972	1545	15	7355	22	4437	35	11792	0.02	37.14	62.37
1973	1450	40	21877	97	19398	136	41275	0.09	29.41	53.00
1974	1861	48	21190	78	15471	126	36661	0.07	38.10	57.80
1975	2967	5	2322	69	11774	75	14096	0.03	6.67	16.47
1976	2276	20	10740	28	5942	48	16682	0.02	41.67	64.38
1977	1975	23	10244	55	11597	78	21841	0.04	29.49	46.90
1978	2066	10	5081	40	8033	50	13114	0.02	20.00	38.74
1979	1971	8	4101	3	721	11	4822	0.01	72.73	85.05
1980	2024	22	10012	52	10747	74	20759	0.04	29.73	48.23
1981	1954	18	9363	55	11168	73	20531	0.04	24.66	45.60
1982	1678	6	5091	11	2425	17	5516	0.01	35.29	56.04
1983	1420	7	5739	16	5469	23	7208	0.02	30.43	51.87
MEANS AND STANDARD DEVIATIONS:										
MEAN:	1823.14	19.14	9714.14	44.14	8820.86	63.36	18535.00	* 0.03	*30.21	*52.41
S.D.:	578.28	15.29	6998.27	26.24	5088.60	35.41	10396.99	* 0.01	* 5.59	*10.02

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1f. Summary of commercial Atlantic salmon catch and effort data for Statistical Area F, 1969-83. Weight in metric tonnes.

STATISTICAL AREA: F

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	1409	30	16686	25	5072	56	21758	0.04	53.57	76.69
1970	929	61	33702	31	6178	92	39880	0.10	66.30	84.51
1971	1459	48	26743	41	8148	89	34891	0.06	53.93	76.65
1972	1685	33	18358	17	3411	50	21768	0.03	66.00	84.33
1973	1226	27	14685	56	11370	83	26055	0.07	32.53	56.36
1974	1608	109	40079	25	5488	134	45567	0.08	81.34	87.96
1975	1875	54	29110	57	10923	111	40033	0.06	48.65	72.72
1976	1823	31	16223	36	7796	67	24019	0.04	46.27	67.54
1977	1582	21	11578	49	10863	70	22441	0.04	30.00	51.59
1978	1588	3	1512	28	6145	31	7657	0.02	9.68	19.75
1979	1617	2	905	12	2750	14	3655	0.01	14.29	24.76
1980	1536	22	10362	67	13953	89	24315	0.06	24.72	42.62
1981	1524	13	6940	38	8644	51	15584	0.03	25.49	44.53
1982	1555	9	3457	8	2238	17	5695	0.01	52.94	60.70
1983	1093	9	4568	15	3397	23	7965	0.02	39.13	57.35
MEANS AND STANDARD DEVIATIONS:										
MEAN:	1530	33	16453	35	7356	68	23808	* 0.04	*48.53	*69.11
S.D.:	235.8	28.25	12134	17.62	3526	34.57	12997	* 0.01	* 6.35	*10.81

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1g. Summary of commercial Atlantic salmon catch and effort data for Statistical Area G, 1969-83. Weight in metric tonnes.

STATISTICAL AREA: G

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	200	4	1996	10	2029	14	4025	0.07	28.57	49.59
1970	298	8	4528	15	3093	24	7621	0.09	33.33	59.41
1971	200	8	4601	1	87	9	4688	0.04	88.89	98.14
1972	126	7	4037	3	578	10	4615	0.08	70.00	87.48
1973	160	17	9679	5	920	22	10599	0.14	77.27	91.32
1974	407	6	3461	4	781	10	4242	0.02	60.00	81.59
1975	452	3	1656	6	1310	9	2966	0.02	33.33	55.83
1976	347	2	925	5	1058	7	1983	0.02	28.57	46.65
1977	292	1	508	5	1033	6	1541	0.02	16.67	32.97
1978	287	1	552	10	2308	11	2860	0.04	9.09	18.75
1979	283	3	1153	23	5428	26	6581	0.09	11.54	17.52
1980	268	12	6153	3	522	14	6675	0.05	85.71	92.18
1981	252	13	7024	4	834	17	7858	0.07	76.47	89.39
1982	242	15	6706	2	395	15	7101	0.06	86.67	94.44
1983	245	7	3615	2	529	9	4144	0.04	77.78	87.23
MEANS AND STANDARD DEVIATIONS:										
MEAN:	268.14	7.00	5782.79	6.86	1455.45	13.86	5238.21	* 0.05	*50.52	*72.22
S.D.:	85.81	5.10	2840.87	5.96	1404.45	6.33	2586.24	* 0.01	* 9.00	* 9.34

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1h. Summary of commercial Atlantic salmon catch and effort data for Statistical Area [illegible] Weight in metric tonnes.

STATISTICAL AREA: H

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	732	45	25018	7	1436	52	26454	0.07	86.54	94.57
1970	669	24	13482	2	444	27	13926	0.04	88.89	96.81
1971	525	15	8153	6	1249	21	9402	0.04	71.43	86.72
1972	303	70	38586	29	5870	99	44456	0.33	70.71	86.80
1973	556	74	40984	25	5134	100	46118	0.18	74.00	88.87
1974	1031	76	46451	23	4655	99	51104	0.10	76.77	90.90
1975	1330	22	10971	9	2010	31	12981	0.02	70.97	84.52
1976	1207	24	12447	15	3200	39	15647	0.03	61.54	79.55
1977	1063	18	10235	18	3900	36	14135	0.03	50.00	72.41
1978	1069	14	7647	21	4651	35	12298	0.03	40.00	62.18
1979	1051	1	455	19	2618	20	3073	0.02	5.00	14.81
1980	1003	35	19347	28	5916	63	25263	0.06	55.56	76.58
1981	979	8	4698	11	2226	19	6924	0.02	42.11	67.85
1982	903	30	16820	16	3526	46	20346	0.05	65.22	82.67
1983	948	11	5959	9	2089	21	8048	0.02	52.38	74.04
MEANS AND STANDARD DEVIATIONS:										
MEAN:	887.21	32.57	18235.29	16.56	3545.21	49.07	21580.50	* 0.06	*66.38	*84.50
S.D.:	289.00	24.64	14312.61	8.46	1755.69	29.89	15319.31	* 0.01	* 3.92	*12.94

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 11. Summary of commercial Atlantic salmon catch and effort data for Statistical Area 1, 1969-85. Weight in metric tonnes.

STATISTICAL AREA: 1

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	436	13	7088	13	2623	26	9711	0.06	50.00	72.99
1970	451	23	12968	5	1010	29	13978	0.06	79.31	92.77
1971	436	8	4244	12	2434	20	6678	0.05	40.00	63.55
1972	342	4	2483	28	5514	32	7997	0.09	12.50	31.05
1973	400	22	12403	19	3906	42	16309	0.10	52.38	76.05
1974	586	8	5184	38	12434	47	17618	0.08	17.02	29.42
1975	594	16	8694	5	1348	21	10042	0.04	76.19	86.58
1976	577	12	6554	21	4508	34	11062	0.06	35.29	59.25
1977	554	4	2224	9	1908	13	4132	0.02	30.77	53.82
1978	576	5	2730	9	2085	14	4815	0.02	35.71	56.70
1979	588	2	916	10	2219	12	3135	0.02	16.67	29.22
1980	593	12	5602	14	2960	26	8562	0.04	46.15	65.43
1981	598	7	3820	10	2031	17	5851	0.03	41.18	65.29
1982	505	19	10191	17	3868	36	14059	0.07	52.78	72.49
1985	580	7	3432	5	1099	12	4531	0.02	58.33	75.74
MEANS AND STANDARD DEVIATIONS:										
MEAN:	516.86	11.07	6078.64	15.00	5489.14	26.36	9567.79	* 0.05	*42.01	*63.53
S.D.:	87.03	6.84	3798.84	9.16	2862.91	10.94	4570.06	* 0.01	* 5.98	* 9.14

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1985 EXCLUDED).

Appendix 1J. Summary of commercial Atlantic salmon catch and effort data for Statistical Area J1, 1969-83. Weight in metric tonnes.

STATISTICAL AREA: J1

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	384	21	10146	36	6543	57	16689	0.15	36.84	60.79
1970	434	11	5982	23	4699	35	10681	0.08	31.43	56.01
1971	541	11	5135	20	3532	31	8667	0.06	35.48	59.25
1972	453	29	13387	39	8874	68	22261	0.15	42.65	60.14
1973	473	19	10250	34	6774	53	17024	0.11	35.85	60.21
1974	422	26	14423	88	17635	114	32058	0.27	22.81	44.99
1975	910	34	18971	74	15213	107	34184	0.12	31.78	55.50
1976	800	37	20094	119	25878	156	45972	0.19	23.72	43.71
1977	734	7	3618	32	7621	39	11239	0.05	17.95	32.19
1978	722	3	1419	15	3021	17	4440	0.02	17.65	31.96
1979	691	11	5777	28	6179	39	11956	0.06	28.21	48.32
1980	675	24	12014	17	3438	41	15452	0.06	58.54	77.75
1981	656	8	4364	20	4208	29	8572	0.04	27.59	50.91
1982	649	16	8413	24	5935	40	14348	0.06	40.00	58.64
1983	508	12	6373	19	4448	31	10821	0.06	38.71	58.89
MEANS AND STANDARD DEVIATIONS:										
MEAN:	610	18	9571	41	8539	59	18110	* 0.10	*31.11	*52.85
S.D.:	160.3	10.54	5692	30.95	6583	39.58	11695	* 0.02	* 2.74	*10.66

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1k. Summary of commercial Atlantic salmon catch and effort data for Statistical Area J2, 1969-83. Weight in metric tonnes.

STATISTICAL AREA: J2

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969		12	6616	226	45290	238	51906		5.04	12.75
1970		23	12707	130	26052	153	38759		15.03	32.78
1971		19	10492	63	12625	82	23117		23.17	45.39
1972		10	5525	80	16032	90	21557		11.11	25.63
1973	826	98	54340	55	11017	153	65357	0.19	64.05	83.14
1974	870	179	87778	32	6497	211	94275	0.24	84.83	93.11
1975	1070	46	28123	128	27406	174	55529	0.16	26.44	50.65
1976	1023	46	27226	204	44515	250	71741	0.24	18.40	37.95
1977	957	8	4394	127	28026	135	32420	0.14	5.93	13.55
1978	939	1	652	75	15640	76	16292	0.08	1.32	4.00
1979	928	3	1623	56	11952	59	13575	0.06	5.08	11.96
1980	881	15	7385	94	19253	109	26638	0.12	13.76	27.72
1981	871	5	2485	76	15723	81	18208	0.09	6.17	13.65
1982	777	4	2108	65	14734	69	16842	0.09	5.80	12.52
1983	647	7	3652	47	10605	53	14257	0.08	13.21	25.62
MEANS AND STANDARD DEVIATIONS:										
MEAN:	914	34	17961	101	21054	134	39015	* 0.15	*24.95	*46.04
S.D.:	88.36	49.33	24972	56.78	11911	64.34	24961	* 0.03	* 8.57	* 3.59

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 11. Summary of commercial Atlantic salmon catch and effort data for Statistical Area 0, 1969-1983. Weights in thousands of pounds.

STATISTICAL AREA: 0

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	2208	74	59722	388	78052	461	117774	0.21	16.05	33.73
1970	3052	94	52712	364	72707	458	125419	0.15	20.52	42.03
1971	2720	125	68680	517	103605	641	172285	0.24	19.50	39.86
1972	2795	93	51406	444	89060	537	140466	0.19	17.32	36.60
1973	2976	116	64733	522	105096	639	169829	0.21	18.15	38.12
1974	2742	109	52161	605	119193	714	171354	0.26	15.27	30.44
1975	3154	213	104182	492	105360	705	209542	0.22	30.21	49.72
1976	3558	163	77883	594	129605	756	207488	0.21	21.56	37.54
1977	3408	138	69265	574	117209	712	186474	0.21	19.38	37.14
1978	3725	54	28421	381	79408	435	107829	0.12	12.41	26.36
1979	3795	97	48340	229	51961	325	100301	0.09	29.85	48.19
1980	3501	228	103479	625	124955	853	228434	0.24	26.73	45.30
1981	3450	238	114680	576	112334	815	227014	0.24	29.20	50.52
1982	3531	158	79449	389	83243	548	162692	0.16	28.83	48.83
1983	3456	88	42982	257	54033	344	97015	0.10	25.58	44.30
MEANS AND STANDARD DEVIATIONS:										
MEAN:	3186.79	135.71	68222.36	478.57	97984.86	614.21	166207.21	* 0.19	*22.10	*41.05
S.D.:	457.73	57.49	25570.91	116.11	22677.64	157.02	43033.98	* 0.01	* 1.58	* 7.73

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1m. Summary of commercial Atlantic salmon catch and effort data for Section 51 (Statistical Area O), 1969-83. Weight in metric tonnes.

STATISTICAL SECTION: 51

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	735	24	12916	130	26110	154	39026	0.21	15.58	33.10
1970	1697	49	27208	206	41196	255	68404	0.15	19.22	39.78
1971	1058	48	26410	202	40462	250	66872	0.24	19.20	39.49
1972	1392	39	21468	229	45833	268	67301	0.19	14.55	31.90
1973	1320	30	16955	184	37095	214	54050	0.16	14.02	31.37
1974	1499	63	30007	339	76559	402	106566	0.27	15.67	28.16
1975	1493	79	38396	224	48028	303	86424	0.20	26.07	44.43
1976	1595	64	30660	233	50811	297	81471	0.19	21.55	37.63
1977	1344	46	23253	233	47485	279	70738	0.21	16.49	32.87
1978	1492	17	8949	172	35854	189	44803	0.13	8.99	19.97
1979	1565	30	14811	62	14083	92	28894	0.06	32.61	51.26
1980	1501	85	38568	252	51218	337	89786	0.22	25.22	42.96
1981	1470	96	46542	195	38461	292	85003	0.20	32.88	54.75
1982	1394	70	34932	171	36696	241	71628	0.17	29.05	48.77
1983	1313	27	13464	87	18528	114	31992	0.09	23.68	42.09
MEANS AND STANDARD DEVIATIONS:										
MEAN:	1397	53	26505	202	42135	255	68640	* 0.18	*20.71	*38.61
S.D.:	242.4	24.08	10906	62.90	14074	77.23	21286	* 0.01	* 1.81	* 7.18

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1n. Summary of commercial Atlantic salmon catch and effort data for Section 52 (Statistical Area O), 1969-83. Weight in metric tonnes.

STATISTICAL SECTION: 52

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	1108	35	18667	197	39697	232	58364	0.21	15.09	31.98
1970	632	26	14707	68	13663	95	28370	0.15	27.37	51.84
1971	1039	58	31991	187	37424	245	69415	0.24	23.67	46.09
1972	752	25	13642	120	24036	145	37678	0.19	17.24	36.21
1973	821	41	22923	168	33785	209	56708	0.25	19.62	40.42
1974	401	16	7675	103	20297	119	27972	0.30	13.45	27.44
1975	671	55	26986	129	27673	184	54659	0.27	29.89	49.37
1976	823	42	20095	153	33369	195	53464	0.24	21.54	37.59
1977	909	45	22413	152	30989	197	53402	0.22	22.84	41.97
1978	675	11	5658	80	16592	90	22250	0.13	12.22	25.43
1979	679	36	17945	78	17616	114	35561	0.17	31.58	50.46
1980	457	83	37831	215	42262	298	80093	0.65	27.85	47.23
1981	478	108	51864	220	41414	328	93278	0.69	32.93	55.60
1982	554	56	27964	125	26575	181	54539	0.33	30.94	51.27
1983	584	33	16483	78	16020	112	32503	0.19	29.46	50.71
MEANS AND STANDARD DEVIATIONS:										
MEAN:	714	46	22883	143	28957	188	51840	* 0.26	*24.20	*44.14
S.D.:	211.3	25.96	12151	50.56	9560	72.25	20329	* 0.03	* 1.86	* 8.47

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 1o. Summary of commercial Atlantic salmon catch and effort data for Section 53 (Statistical Area O), 1969-83. Weight in metric tonnes.

STATISTICAL SECTION: 53

YEAR	EFFORT GEAR UNITS	GRILSE WEIGHT	GRILSE NUMBER	SALMON WEIGHT	SALMON NUMBER	TOTAL WEIGHT	TOTAL NUMBER	CUE	PERCENT GRILSE(W)	PERCENT GRILSE(N)
1969	221	9	4928	37	7400	46	12328	0.21	19.57	39.97
1970	238	6	3387	30	5965	36	9352	0.15	16.67	36.22
1971	299	10	5443	61	12219	71	17662	0.24	14.08	30.82
1972	285	7	4024	47	9504	55	13528	0.19	12.73	29.75
1973	594	34	18980	113	22730	147	41710	0.25	23.13	45.50
1974	288	12	5880	35	6889	47	12769	0.16	25.53	46.05
1975	556	43	20795	75	16108	118	36903	0.21	36.44	56.35
1976	549	29	14053	139	30414	169	44467	0.31	17.16	31.60
1977	612	25	12392	98	20038	123	32430	0.20	20.33	38.21
1978	1001	19	9909	74	15438	93	25347	0.09	20.43	39.09
1979	979	15	7743	73	16521	88	24264	0.09	17.05	31.91
1980	1018	41	18587	112	22337	153	40924	0.15	26.80	45.42
1981	981	20	9616	123	24853	143	34469	0.15	13.99	27.90
1982	1046	18	9174	66	14006	84	23180	0.08	21.43	39.58
1983	1064	21	9917	63	13368	84	23285	0.08	25.00	42.59
MEANS AND STANDARD DEVIATIONS:										
MEAN:	619	21	10351	77	16030	98	26381	* 0.16	*20.98	*39.24
S.D.:	326.4	12.24	5819	34.86	7373	44.35	12140	* 0.02	* 1.90	* 7.68

NOTE: FLAGGED VALUES INDICATE CALCULATIONS OBTAINED USING RATIO ESTIMATORS

NOTE: MEANS AND STANDARD DEVIATIONS BASED ON YEARS 1969-1982. (IE; 1983 EXCLUDED).

Appendix 2a. Summary of recreational Atlantic salmon catch and effort data for Statistical Area A, 1953-83.

STATISTICAL AREA: A

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	77	58	8	66	0.86	.
1954	134	33	0	33	0.25	100
1955	36	11	0	11	0.31	100
1956	164	70	0	70	0.43	100
1957	68	47	0	47	0.69	100
1958	236	35	0	35	0.15	100
1959	215	45	0	45	0.21	100
1960	183	48	1	49	0.27	98
1961	179	62	3	65	0.36	94
1962	368	95	0	95	0.26	100
1963	1332	216	0	216	0.16	100
1964	1406	440	0	440	0.31	100
1965	1710	735	4	739	0.43	99
1966	3074	1284	28	1312	0.43	96
1967	3412	497	2	499	0.15	100
1968	3778	1300	27	1327	0.35	95
1969	4310	966	45	1011	0.23	97
1970	2312	825	1	826	0.36	100
1971	1745	765	11	776	0.44	99
1972	1360	520	0	520	0.38	100
1973	2379	1218	2	1220	0.51	100
1974	2577	870	4	874	0.34	100
1975	2405	1153	0	1153	0.48	100
1976	3116	1039	1	1040	0.33	100
1977	3590	1673	4	1677	0.47	100
1978	2694	849	1	850	0.32	100
1979	3176	2166	0	2166	0.68	100
1980	3222	1819	37	1856	0.58	98
1981	3740	2505	11	2516	0.67	99
1982	4429	2687	88	2775	0.63	97
1983	4943	1749	4	1753	0.35	100
MEANS STANDARD DEVIATIONS N'S:						
53-57	95.6	43.8	1.6	45.4	0.47	100
S.D.	52.0	22.9	3.6	24.3	0.11	0
N	5	5	5	5	5	4
58-62	236.2	57.0	0.8	57.8	0.24	98
S.D.	77.3	23.3	1.3	23.4	0.03	1
N	5	5	5	5	5	5
63-67	2186.8	634.4	6.8	641.2	0.29	99
S.D.	981.8	407.4	12.0	418.6	0.07	1
N	5	5	5	5	5	5
68-72	2701.0	875.2	16.8	892.0	0.33	98
S.D.	1285.7	287.0	19.1	299.8	0.04	1
N	5	5	5	5	5	5
73-77	2813.4	1190.6	2.2	1192.8	0.42	100
S.D.	525.8	300.3	1.8	300.7	0.04	0
N	5	5	5	5	5	5
78-82	3452.2	2005.2	27.4	2032.6	0.59	99
S.D.	659.8	726.6	37.0	747.1	0.06	1
N	5	5	5	5	5	5
69-82	2932.5	1361.1	14.6	1375.7	0.47	99
S.D.	895.9	690.5	25.4	704.2	0.05	0
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2b. Summary of recreational Atlantic salmon catch and effort data for Statistical Area B, 1953-83.

STATISTICAL AREA: B

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	6630	2984	501	3485	0.40	.
1954	7344	1172	428	1600	0.22	87
1955	5125	2367	249	2616	0.51	82
1956	10672	3892	458	4350	0.41	84
1957	8789	4423	527	4950	0.56	88
1958	5888	4364	637	5001	0.85	87
1959	6321	3700	520	4220	0.67	89
1960	7051	3441	509	3950	0.56	88
1961	5277	2118	162	2280	0.43	96
1962	8842	4397	482	4879	0.55	81
1963	10910	3710	332	4042	0.37	93
1964	15608	7237	680	7917	0.51	85
1965	13749	4233	318	4551	0.33	96
1966	15249	6433	194	6627	0.43	96
1967	13915	4163	63	4226	0.30	99
1968	15318	5938	201	6139	0.40	95
1969	13807	4024	114	4138	0.30	98
1970	15759	4849	47	4896	0.31	99
1971	11379	3783	58	3841	0.34	99
1972	10778	3444	24	3468	0.32	99
1973	14544	6710	49	6759	0.46	99
1974	22038	5373	82	5455	0.25	99
1975	22384	5943	166	6109	0.27	97
1976	24787	6683	188	6871	0.28	97
1977	28117	8396	1086	9482	0.34	89
1978	24131	8774	502	9276	0.38	94
1979	21496	8026	327	8353	0.39	96
1980	25172	9414	507	9921	0.39	94
1981	32282	13536	361	13897	0.43	96
1982	32929	9973	258	10231	0.31	98
1983	26649	8954	297	9251	0.35	97
MEANS STANDARD DEVIATIONS N'S:						
53-57	8112.0	2967.6	432.6	3400.2	0.42	86
S.D.	2048.9	1280.4	109.5	1338.6	0.06	1
N	5	5	5	5	5	4
58-62	6675.8	3604.0	462.0	4066.0	0.61	89
S.D.	1372.6	928.8	177.9	1091.1	0.06	2
N	5	5	5	5	5	5
63-67	13886.2	5155.2	317.4	5472.6	0.39	94
S.D.	1850.6	1572.4	230.0	1714.5	0.04	2
N	5	5	5	5	5	5
68-72	13408.2	4407.6	88.8	4496.4	0.34	98
S.D.	2256.6	1000.3	70.9	1057.5	0.02	1
N	5	5	5	5	5	5
73-77	22374.0	6621.0	314.2	6935.2	0.31	95
S.D.	5005.7	1137.9	435.3	1532.6	0.03	3
N	5	5	5	5	5	5
78-82	27202.0	9944.6	391.0	10335.6	0.38	96
S.D.	5116.5	2134.9	110.1	2116.6	0.02	1
N	5	5	5	5	5	5
69-82	21400.2	7066.3	269.2	7335.5	0.34	96
S.D.	7236.2	2827.1	286.7	2993.1	0.02	1
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2c. Summary of recreational Atlantic salmon catch and effort data for Statistical Area C, 1953-83.

STATISTICAL AREA: C

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	6209	1099	37	1136	0.18	.
1954	3302	499	29	528	0.16	97
1955	1764	815	35	850	0.48	93
1956	12072	1077	62	1139	0.09	93
1957	2326	822	44	866	0.37	96
1958	2719	1384	40	1424	0.52	95
1959	3063	1125	43	1168	0.38	97
1960	2580	767	14	781	0.30	99
1961	2185	409	36	445	0.20	96
1962	2639	973	62	1035	0.39	87
1963	4519	1546	61	1607	0.36	94
1964	4877	2376	63	2439	0.50	96
1965	5231	1803	33	1836	0.35	99
1966	4281	1431	35	1466	0.34	98
1967	3754	1569	25	1594	0.42	98
1968	3732	2226	44	2270	0.61	97
1969	5769	2605	27	2632	0.46	99
1970	3189	2226	35	2261	0.71	99
1971	5963	1680	38	1718	0.29	98
1972	2015	1895	20	1915	0.95	99
1973	3894	2112	12	2124	0.55	99
1974	9335	1637	21	1658	0.18	99
1975	7527	1988	23	2011	0.27	99
1976	6975	1898	65	1963	0.28	97
1977	10572	4616	44	4660	0.44	98
1978	9108	2857	28	2885	0.32	99
1979	3851	1327	20	1347	0.35	99
1980	8155	2702	29	2731	0.33	98
1981	8863	3488	35	3523	0.40	99
1982	9935	2433	53	2486	0.25	99
1983	10195	2357	170	2527	0.25	93
MEANS STANDARD DEVIATIONS N'S:						
53-57	5134.6	862.4	41.4	903.8	0.18	95
S.D.	4239.4	243.9	12.7	252.4	0.05	1
N	5	5	5	5	5	4
58-62	2637.2	931.6	39.0	970.6	0.37	96
S.D.	314.5	368.8	17.2	374.5	0.05	1
N	5	5	5	5	5	5
63-67	4532.4	1745.0	43.4	1788.4	0.39	97
S.D.	564.8	377.7	17.4	387.4	0.03	1
N	5	5	5	5	5	5
68-72	4133.6	2126.4	32.8	2159.2	0.52	98
S.D.	1700.2	354.2	9.4	353.7	0.10	0
N	5	5	5	5	5	5
73-77	7660.6	2450.2	33.0	2483.2	0.32	98
S.D.	2547.3	1223.2	21.4	1229.0	0.06	0
N	5	5	5	5	5	5
78-82	7982.4	2561.4	33.0	2594.4	0.33	99
S.D.	2395.5	791.5	12.4	795.8	0.03	0
N	5	5	5	5	5	5
69-82	6796.5	2390.3	32.1	2422.4	0.36	99
S.D.	2735.8	853.9	14.3	857.8	0.03	0
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2d. Summary of recreational Atlantic salmon catch and effort data for Statistical Area D, 1953-83.

STATISTICAL AREA: D

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	6513	118	0	118	0.02	.
1954	2515	44	0	44	0.02	100
1955	628	92	0	92	0.15	100
1956	4402	92	2	94	0.02	98
1957	805	87	0	87	0.11	100
1958	592	115	0	115	0.19	100
1959	535	55	0	55	0.10	100
1960	547	54	0	54	0.10	100
1961	512	19	0	19	0.04	100
1962	575	53	0	53	0.09	100
1963	837	93	1	94	0.11	98
1964	978	92	0	92	0.09	100
1965	871	85	3	88	0.10	97
1966	935	90	0	90	0.10	100
1967	1480	89	0	89	0.06	100
1968	1126	120	0	120	0.11	100
1969	917	106	0	106	0.12	100
1970	650	84	3	87	0.13	97
1971	710	55	1	56	0.08	99
1972	1345	119	0	119	0.09	100
1973	1683	250	0	250	0.15	100
1974	2685	303	1	304	0.11	100
1975	1851	94	1	95	0.05	100
1976	2864	247	2	249	0.09	98
1977	1869	401	19	420	0.22	93
1978	2237	296	7	303	0.14	98
1979	1766	244	2	246	0.14	99
1980	2807	320	14	334	0.12	95
1981	3406	606	27	633	0.19	92
1982	3031	288	17	305	0.10	97
1983	3684	296	10	306	0.08	97
MEANS STANDARD DEVIATIONS N'S:						
53-57	2972.6	86.6	0.4	87.0	0.03	99
S.D.	2499.1	26.7	0.9	26.9	0.01	1
N	5	5	5	5	5	4
58-62	552.2	59.2	0.0	59.2	0.11	100
S.D.	31.8	34.7	0.0	34.7	0.03	0
N	5	5	5	5	5	5
63-67	1020.2	89.8	0.8	90.6	0.09	99
S.D.	262.8	3.1	1.3	2.4	0.01	1
N	5	5	5	5	5	5
68-72	949.6	96.8	0.8	97.6	0.10	99
S.D.	289.7	27.5	1.3	26.8	0.01	1
N	5	5	5	5	5	5
73-77	2190.4	259.0	4.6	263.6	0.12	98
S.D.	541.8	111.3	8.1	117.2	0.03	2
N	5	5	5	5	5	5
78-82	2649.4	350.8	13.4	364.2	0.14	97
S.D.	650.6	145.3	9.6	153.6	0.02	1
N	5	5	5	5	5	5
68-82	1987.2	243.8	6.7	250.5	0.13	97
S.D.	887.7	148.9	8.8	156.3	0.01	1
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2e. Summary of recreational Atlantic salmon catch and effort data for Statistical Area E, 1953-83.

STATISTICAL AREA: E

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	244	43	0	43	0.18	.
1954	41	5	0	5	0.12	100
1955	7	0	0	0	0.00	100
1956	307	27	1	28	0.09	0
1957	59	24	1	25	0.42	96
1958	72	19	0	19	0.26	100
1959	134	13	0	13	0.10	100
1960	128	25	1	26	0.20	93
1961	54	7	2	9	0.17	93
1962	.	.	.	.	.	.
1963	275	36	0	36	0.13	.
1964	660	59	0	59	0.09	100
1965	762	165	1	166	0.22	98
1966	647	97	0	97	0.15	100
1967	967	78	0	78	0.08	100
1968	829	31	1	32	0.04	99
1969	1216	33	0	33	0.03	100
1970	1103	20	1	21	0.02	97
1971	1295	40	0	40	0.03	100
1972	875	61	0	61	0.07	100
1973	1167	131	0	131	0.11	100
1974	2019	133	2	135	0.07	98
1975	1436	40	0	40	0.03	100
1976	1128	30	0	30	0.03	100
1977	1775	78	1	79	0.04	97
1978	1786	99	1	100	0.06	99
1979	1332	125	0	125	0.09	100
1980	1546	102	1	103	0.07	99
1981	1348	123	2	125	0.09	98
1982	1621	155	10	165	0.10	92
1983	1804	139	34	173	0.10	82
MEANS STANDARD DEVIATIONS N'S:						
53-57	131.6	19.8	0.4	20.2	0.15	97
S.D.	134.5	17.5	0.5	17.6	0.04	2
N	5	5	5	5	5	4
58-62	97.0	16.0	0.8	16.8	0.17	96
S.D.	40.0	7.7	1.0	7.4	0.04	2
N	4	4	4	4	4	4
63-67	668.2	87.0	0.2	87.2	0.13	100
S.D.	260.8	49.1	0.4	49.5	0.03	0
N	5	5	5	5	5	4
68-72	1063.6	37.0	0.4	37.4	0.04	99
S.D.	205.5	15.2	0.5	14.8	0.01	0
N	5	5	5	5	5	5
73-77	1505.0	82.4	0.6	83.0	0.06	99
S.D.	386.7	48.7	0.9	49.2	0.01	0
N	5	5	5	5	5	5
78-82	1526.6	120.8	2.8	123.6	0.08	97
S.D.	191.3	22.5	4.1	26.0	0.01	2
N	5	5	5	5	5	5
69-82	1403.4	83.6	1.3	84.9	0.06	98
S.D.	314.8	46.0	2.6	47.4	0.01	1
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2f. Summary of recreational Atlantic salmon catch and effort data for Statistical Area F, 1953-83.

STATISTICAL AREA: F

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	50	6	0	6	0.12	.
1954	.	.	.	.	.	.
1955	.	.	.	.	.	.
1956	.	.	.	.	.	.
1957	.	.	.	.	.	.
1958	.	.	.	.	.	.
1959	.	.	.	.	.	.
1960	.	.	.	.	.	.
1961	.	.	.	.	.	.
1962	.	.	.	.	.	.
1963	.	.	.	.	.	.
1964	.	.	.	.	.	.
1965	17	44	6	50	2.94	.
1966	100	32	2	34	0.34	96
1967	.	.	.	.	.	.
1968	166	22	0	22	0.13	.
1969	16	12	0	12	0.75	100
1970	.	.	.	.	.	.
1971	290	25	9	34	0.12	.
1972	270	28	0	28	0.10	100
1973	410	94	4	98	0.24	88
1974	659	51	0	51	0.08	100
1975	527	87	0	87	0.17	100
1976	514	80	0	80	0.16	100
1977	530	81	0	81	0.15	100
1978	269	44	0	44	0.16	100
1979	331	100	0	100	0.30	100
1980	316	120	0	120	0.38	100
1981	384	77	0	77	0.20	100
1982	538	85	9	94	0.17	90
1983	414	41	5	46	0.11	94
MEANS STANDARD DEVIATIONS N'S:						
53-57	50.0	6.0	0.0	6.0	0.12	.
S.D.	.	.	.	.	.	.
N	1	1	1	1	1	.
58-62	.	.	.	.	.	.
S.D.	.	.	.	.	.	.
N	.	.	.	.	.	.
63-67	58.5	38.0	4.0	42.0	0.72	96
S.D.	58.7	8.5	2.8	11.3	0.65	.
N	2	2	2	2	2	1
68-72	185.5	21.8	2.3	24.0	0.13	100
S.D.	125.4	6.9	4.5	9.4	0.02	0
N	4	4	4	4	4	2
73-77	528.0	78.6	0.8	79.4	0.15	99
S.D.	88.4	16.4	1.8	17.4	0.03	1
N	5	5	5	5	5	5
78-82	367.6	85.2	1.8	87.0	0.24	98
S.D.	103.7	28.3	4.0	28.5	0.04	2
N	5	5	5	5	5	5
69-82	388.8	68.0	1.7	69.7	0.18	98
S.D.	167.4	32.8	3.4	32.6	0.02	1
N	13	13	13	13	13	12

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2g. Summary of recreational Atlantic salmon catch and effort data for Statistical Area G, 1953-83.

STATISTICAL AREA: G

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	3012	1954	44	1998	0.66	.
1954	1712	617	32	649	0.38	98
1955	1701	673	36	709	0.42	94
1956	2411	1319	22	1341	0.56	97
1957	2602	1355	48	1403	0.54	96
1958	3094	1350	51	1401	0.45	96
1959	3557	1447	52	1499	0.42	96
1960	4223	937	46	983	0.23	97
1961	2681	705	17	722	0.27	98
1962	3685	1002	38	1040	0.28	95
1963	4311	1620	48	1668	0.39	95
1964	6044	1295	23	1318	0.22	99
1965	5214	1852	76	1928	0.37	94
1966	3416	822	13	835	0.24	99
1967	7421	900	17	917	0.12	98
1968	5264	1105	1	1106	0.21	100
1969	6976	1422	9	1431	0.21	99
1970	7701	1893	12	1905	0.25	99
1971	6704	1620	19	1639	0.24	99
1972	5633	1139	8	1147	0.20	100
1973	7660	2160	20	2180	0.28	98
1974	9162	1494	9	1503	0.16	100
1975	10046	1872	6	1878	0.19	100
1976	8809	1623	12	1635	0.19	99
1977	8766	1080	9	1089	0.12	99
1978	7224	1303	17	1320	0.18	98
1979	5859	1704	15	1719	0.29	99
1980	6446	2379	61	2440	0.38	97
1981	6343	1862	52	1914	0.30	98
1982	8574	1825	33	1858	0.22	98
1983	10754	2303	71	2374	0.22	96
MEANS STANDARD DEVIATIONS N'S:						
53-57	2287.6	1183.6	36.4	1220.0	0.53	97
S.D.	573.2	552.9	10.2	556.9	0.05	1
N	5	5	5	5	5	4
58-62	3448.0	1088.2	40.8	1129.0	0.33	97
S.D.	587.9	305.9	14.4	318.5	0.04	0
N	5	5	5	5	5	5
63-67	5281.2	1297.8	35.4	1333.2	0.25	97
S.D.	1548.0	446.0	26.5	471.0	0.05	1
N	5	5	5	5	5	5
68-72	6455.6	1435.8	9.8	1445.6	0.22	99
S.D.	997.5	331.9	6.5	336.6	0.01	0
N	5	5	5	5	5	5
73-77	8888.6	1645.8	11.2	1657.0	0.19	99
S.D.	858.1	406.0	5.4	409.0	0.02	0
N	5	5	5	5	5	5
78-82	6889.2	1814.6	35.6	1850.2	0.27	98
S.D.	1061.5	385.6	20.6	403.2	0.03	0
N	5	5	5	5	5	5
69-82	7564.5	1669.7	20.1	1689.9	0.22	99
S.D.	1339.8	367.7	17.0	378.7	0.02	0
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2h. Summary of recreational Atlantic salmon catch and effort data for Statistical Area H, 1953-83.

STATISTICAL AREA: H

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	2216	712	44	756	0.34	.
1954	1486	356	37	393	0.26	95
1955	1584	306	29	335	0.21	92
1956	2814	425	14	439	0.16	96
1957	2044	484	30	514	0.25	93
1958	3046	1043	65	1108	0.36	88
1959	2525	657	33	690	0.27	97
1960	2197	511	23	534	0.24	97
1961	1507	236	2	238	0.16	100
1962	3658	679	68	747	0.20	78
1963	3785	1058	38	1096	0.29	95
1964	3507	1408	18	1426	0.41	98
1965	4591	875	43	918	0.20	97
1966	4334	820	22	842	0.19	98
1967	4942	333	4	337	0.07	100
1968	6641	1387	6	1393	0.21	98
1969	3800	979	29	1008	0.27	98
1970	3899	601	7	608	0.16	99
1971	4796	928	17	945	0.20	97
1972	5841	567	4	571	0.10	100
1973	8714	1785	42	1827	0.21	93
1974	10987	1212	14	1226	0.11	99
1975	5999	427	9	436	0.07	99
1976	8811	730	10	740	0.08	98
1977	7213	1097	5	1102	0.15	99
1978	8764	1605	32	1637	0.19	97
1979	6405	849	8	857	0.13	100
1980	9588	1524	27	1551	0.16	97
1981	9309	1317	29	1346	0.14	98
1982	9331	1256	10	1266	0.14	99
1983	9173	1140	79	1219	0.13	94
MEANS STANDARD DEVIATIONS N'S:						
53-57	2032.8	456.6	30.8	487.4	0.24	94
S.D.	535.1	157.9	11.2	163.8	0.04	1
N	5	5	5	5	5	4
58-62	2586.6	625.2	38.2	663.4	0.26	94
S.D.	818.5	292.8	28.2	317.4	0.04	3
N	5	5	5	5	5	5
63-67	4231.8	898.8	25.0	923.8	0.22	97
S.D.	585.0	391.0	15.7	397.8	0.05	1
N	5	5	5	5	5	5
68-72	4995.4	892.4	12.6	905.0	0.18	99
S.D.	1234.3	333.2	10.5	335.5	0.03	0
N	5	5	5	5	5	5
73-77	8344.8	1050.2	16.0	1066.2	0.13	98
S.D.	1878.7	514.6	14.9	526.6	0.02	1
N	5	5	5	5	5	5
78-82	8679.4	1310.2	21.2	1331.4	0.15	98
S.D.	1306.4	295.1	11.3	304.6	0.01	0
N	5	5	5	5	5	5
69-82	7389.8	1062.6	17.4	1080.0	0.15	98
S.D.	2287.4	411.2	12.1	420.9	0.01	0
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2i. Summary of recreational Atlantic salmon catch and effort data for Statistical Area 1, 1953-83.

STATISTICAL AREA: I

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	308	99	27	126	0.41	.
1954	130	75	2	77	0.59	98
1955	105	25	6	31	0.30	93
1956	225	65	9	74	0.33	74
1957	115	37	6	43	0.37	92
1958	189	107	11	118	0.62	77
1959	230	121	22	143	0.62	83
1960	242	89	11	100	0.41	92
1961	203	53	7	60	0.30	93
1962	352	197	10	207	0.59	84
1963	295	260	17	277	0.94	92
1964	677	483	7	490	0.72	97
1965	778	600	2	602	0.77	100
1966	416	355	5	360	0.87	99
1967	1271	579	7	586	0.46	98
1968	1579	1484	24	1508	0.96	96
1969	1739	3098	2	3100	1.78	100
1970	1770	2519	3	2522	1.42	100
1971	1580	1754	25	1779	1.13	99
1972	1599	1780	20	1800	1.13	99
1973	1836	1576	16	1592	0.87	99
1974	2415	1453	9	1462	0.61	99
1975	2410	975	4	979	0.41	100
1976	2796	1240	10	1250	0.45	99
1977	2873	1436	5	1441	0.50	100
1978	3339	1437	4	1441	0.43	100
1979	2834	912	3	915	0.32	100
1980	4231	1981	27	2008	0.47	97
1981	5206	2505	35	2540	0.49	98
1982	6131	1975	22	1997	0.33	99
1983	5271	1382	3	1385	0.26	100
MEANS STANDARD DEVIATIONS N'S:						
53-57	176.6	60.2	10.0	70.2	0.40	92
S.D.	87.6	29.7	9.8	36.9	0.04	4
N	5	5	5	5	5	4
58-62	243.2	113.4	12.2	125.6	0.52	87
S.D.	64.4	53.2	5.7	54.6	0.06	3
N	5	5	5	5	5	5
63-67	687.4	455.4	7.6	463.0	0.67	98
S.D.	379.7	146.0	5.6	141.8	0.10	1
N	5	5	5	5	5	5
68-72	1653.4	2127.0	14.8	2141.8	1.30	99
S.D.	93.3	665.1	11.4	654.4	0.15	0
N	5	5	5	5	5	5
73-77	2466.0	1336.0	8.8	1344.8	0.55	99
S.D.	411.5	235.0	4.8	238.2	0.07	0
N	5	5	5	5	5	5
78-82	4348.2	1762.0	18.2	1780.2	0.41	99
S.D.	1345.3	606.9	14.2	620.4	0.04	0
N	5	5	5	5	5	5
69-82	2911.4	1760.1	13.2	1773.3	0.61	99
S.D.	1397.9	617.7	10.9	620.6	0.09	0
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2j. Summary of recreational Atlantic salmon catch and effort data for Statistical Area J1, 1953-83.

STATISTICAL AREA: J1

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	530	343	30	373	0.70	.
1954	251	247	28	275	1.10	92
1955	180	389	39	428	2.38	86
1956	404	609	38	647	1.60	91
1957	503	452	32	484	0.96	95
1958	717	558	62	620	0.86	88
1959	831	618	24	642	0.77	96
1960	256	674	19	693	2.71	97
1961	837	590	70	660	0.79	91
1962	1190	1435	40	1475	1.24	94
1963	1082	1240	35	1275	1.18	98
1964	1396	1691	39	1730	1.24	97
1965	1559	1367	56	1423	0.91	97
1966	1945	1565	86	1651	0.85	94
1967	2054	807	53	860	0.42	97
1968	2784	2128	65	2193	0.79	93
1969	3211	2131	49	2180	0.68	98
1970	3123	1972	70	2042	0.65	97
1971	3772	1956	35	1991	0.53	98
1972	3364	2720	48	2768	0.82	98
1973	3800	2514	16	2530	0.67	99
1974	5757	2517	26	2543	0.44	99
1975	5028	2559	33	2592	0.52	99
1976	5092	2467	29	2496	0.49	99
1977	4356	2108	10	2118	0.49	100
1978	4143	2420	11	2431	0.59	99
1979	2683	1571	2	1573	0.59	100
1980	4896	2688	15	2703	0.55	99
1981	6093	3353	2	3355	0.55	100
1982	7174	3898	24	3922	0.55	99
1983	8561	2776	22	2798	0.33	99
MEANS STANDARD DEVIATIONS N'S:						
53-57	373.6	408.0	33.4	441.4	1.18	92
S.D.	153.8	134.9	4.9	138.4	0.23	2
N	5	5	5	5	5	4
58-62	766.2	775.0	43.0	818.0	1.07	93
S.D.	336.0	371.4	22.6	368.2	0.17	2
N	5	5	5	5	5	5
63-67	1607.2	1334.0	53.8	1387.8	0.86	96
S.D.	398.9	342.2	20.1	346.0	0.15	1
N	5	5	5	5	5	5
68-72	3250.8	2181.4	53.4	2234.8	0.69	97
S.D.	360.7	312.3	14.1	310.5	0.06	1
N	5	5	5	5	5	5
73-77	4806.6	2433.0	22.8	2455.8	0.51	99
S.D.	750.0	184.6	9.5	192.0	0.03	0
N	5	5	5	5	5	5
78-82	4997.8	2786.0	10.8	2796.8	0.56	100
S.D.	1734.5	891.3	9.3	896.9	0.01	0
N	5	5	5	5	5	5
69-82	4463.7	2491.0	26.4	2517.4	0.56	99
S.D.	1281.6	588.6	19.5	585.4	0.02	0
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2k. Summary of recreational Atlantic salmon catch and effort data for Statistical Area J2, 1953-83.

STATISTICAL AREA: J2

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	640	341	84	425	0.66	.
1954	439	185	39	224	0.51	90
1955	197	166	11	177	0.90	94
1956	761	359	20	379	0.50	89
1957	1006	742	20	762	0.76	95
1958	1863	611	33	644	0.35	96
1959	1191	650	106	756	0.63	85
1960	1787	876	25	901	0.50	96
1961	1586	795	106	901	0.57	89
1962	1963	1274	78	1352	0.69	91
1963	2648	1398	79	1477	0.56	94
1964	2221	1350	89	1439	0.65	94
1965	2597	1310	106	1416	0.55	93
1966	1941	1376	71	1447	0.75	95
1967	2409	967	72	1039	0.43	95
1968	3038	1309	78	1387	0.46	93
1969	2757	1754	103	1857	0.67	93
1970	1808	1286	80	1366	0.76	96
1971	2159	804	21	825	0.38	98
1972	2054	1333	38	1371	0.67	95
1973	2368	1412	28	1440	0.61	98
1974	2370	1164	16	1180	0.50	99
1975	2239	1477	23	1500	0.67	98
1976	1719	754	8	762	0.44	99
1977	1975	1110	51	1161	0.59	94
1978	1871	505	23	528	0.28	98
1979	2727	1645	12	1677	0.61	98
1980	3058	1220	31	1251	0.41	98
1981	3575	2264	21	2285	0.64	98
1982	4811	3020	22	3042	0.63	99
1983	4235	1278	10	1288	0.30	100
MEANS STANDARD DEVIATIONS N'S:						
53-57	608.6	358.6	34.8	393.4	0.65	92
S.D.	308.3	231.6	29.3	230.5	0.07	2
N	5	5	5	5	5	4
58-62	1678.0	841.2	69.6	910.8	0.54	91
S.D.	305.4	264.7	38.9	269.3	0.06	2
N	5	5	5	5	5	5
63-67	2363.2	1280.2	83.4	1363.6	0.58	94
S.D.	290.0	178.1	14.5	182.8	0.05	0
N	5	5	5	5	5	5
68-72	2363.2	1297.2	64.0	1361.2	0.58	95
S.D.	513.8	336.7	33.5	365.4	0.07	1
N	5	5	5	5	5	5
73-77	2134.2	1183.4	25.2	1208.6	0.57	98
S.D.	282.4	286.6	16.3	292.0	0.04	1
N	5	5	5	5	5	5
78-82	3208.4	1734.8	21.8	1756.6	0.55	98
S.D.	1089.2	963.6	6.8	962.1	0.06	0
N	5	5	5	5	5	5
69-82	2535.1	1412.0	34.1	1446.1	0.57	97
S.D.	836.0	640.5	26.9	643.0	0.03	1
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 21. Summary of recreational Atlantic salmon catch and effort data for Statistical Area O, 1954-83.

STATISTICAL AREA: O

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	167	476	278	754	4.51	.
1955	654	280	252	532	0.81	65
1956	407	177	197	374	0.92	59
1957	686	1250	337	1587	2.31	34
1958	641	1375	70	1445	2.25	95
1959	761	1320	132	1452	1.91	91
1960	643	943	91	1034	1.61	94
1961	1105	1180	238	1418	1.28	80
1962	947	1250	123	1373	1.45	91
1963	1303	1793	197	1990	1.53	86
1964	2789	2750	456	3206	1.15	80
1965	3422	2345	627	2972	0.87	81
1966	4619	3315	706	4021	0.87	77
1967	3337	2206	589	2795	0.84	85
1968	4054	3776	665	4441	1.10	77
1969	3646	2877	393	3270	0.90	91
1970	5308	4013	562	4575	0.86	84
1971	4898	3934	486	4420	0.90	89
1972	5165	2947	424	3371	0.65	90
1973	8271	7492	1009	8501	1.03	74
1974	5492	2501	803	3304	0.60	90
1975	4209	3972	327	4299	1.02	88
1976	7155	5726	830	6556	0.92	83
1977	7234	4594	1286	5880	0.81	82
1978	6227	2669	767	3436	0.55	86
1979	5333	4118	609	4727	0.89	81
1980	4948	3800	889	4689	0.95	82
1981	5230	5198	520	5718	1.09	88
1982	6400	4104	621	4725	0.74	89
1983	6657	4372	428	4800	0.72	91
MEANS STANDARD DEVIATIONS N'S:						
53-57	478.5	545.8	266.0	811.8	1.70	54
S.D.	242.2	485.6	58.1	539.8	0.55	9
N	4	4	4	4	4	3
58-62	819.4	1213.6	130.8	1344.4	1.64	90
S.D.	202.6	168.1	64.9	176.3	0.17	2
N	5	5	5	5	5	5
63-67	3094.0	2481.8	515.0	2996.8	0.97	82
S.D.	1203.4	577.8	199.4	732.8	0.08	2
N	5	5	5	5	5	5
68-72	4614.2	3509.4	506.0	4015.4	0.87	87
S.D.	727.4	552.5	109.9	638.1	0.07	2
N	5	5	5	5	5	5
73-77	6472.2	4857.0	851.0	5708.0	0.88	84
S.D.	1609.7	1877.6	350.5	2019.5	0.07	3
N	5	5	5	5	5	5
78-82	5627.6	3977.8	681.2	4659.0	0.83	86
S.D.	644.7	904.0	146.1	810.4	0.09	2
N	5	5	5	5	5	5
69-82	5679.7	4138.9	680.4	4819.4	0.85	86
S.D.	1250.6	1334.4	266.4	1460.7	0.04	1
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2m. Summary of recreational Atlantic salmon catch and effort data for Section 51 (Statistical Area 0), 1955-83.

STATISTICAL SECTION:51

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	.	.	.	.	.	.
1955	41	18	2	20	0.49	.
1956	101	20	0	20	0.20	100
1957	5	15	2	17	3.40	91
1958	25	49	0	49	1.96	100
1959	13	16	1	17	1.31	98
1960	31	46	4	50	1.61	80
1961	43	49	1	50	1.16	98
1962	26	42	2	44	1.69	96
1963	103	231	10	241	2.34	81
1964	175	202	32	234	1.34	88
1965	277	140	29	169	0.61	87
1966	50	88	7	95	1.90	95
1967	48	78	0	78	1.63	100
1968	50	46	0	46	0.92	100
1969	.	.	.	.	.	.
1970	109	201	5	206	1.89	.
1971	78	104	6	110	1.41	97
1972	52	58	2	60	1.15	98
1973	198	301	2	303	1.53	97
1974	312	232	3	235	0.75	99
1975	210	91	9	100	0.48	96
1976	324	179	11	190	0.59	89
1977	372	257	38	295	0.79	82
1978	301	132	26	158	0.52	91
1979	353	299	18	317	0.90	88
1980	240	198	45	243	1.01	87
1981	111	131	0	131	1.18	100
1982	268	114	11	125	0.47	92
1983	627	326	18	344	0.55	86
MEANS STANDARD DEVIATIONS N'S:						
53-57	49.0	17.7	1.3	19.0	0.39	95
S.D.	48.5	2.5	1.2	1.7	0.21	5
N	3	3	3	3	3	2
58-62	27.6	40.4	1.6	42.0	1.52	96
S.D.	10.9	13.9	1.5	14.2	0.16	2
N	5	5	5	5	5	5
63-67	130.6	147.8	15.6	163.4	1.25	90
S.D.	96.8	67.8	14.1	75.8	0.37	2
N	5	5	5	5	5	5
68-72	72.3	102.3	3.3	105.5	1.46	98
S.D.	27.6	70.4	2.8	72.4	0.23	1
N	4	4	4	4	4	3
73-77	283.2	212.0	12.6	224.6	0.79	93
S.D.	75.8	80.7	14.7	83.6	0.14	4
N	5	5	5	5	5	5
78-82	254.6	174.8	20.0	194.8	0.77	91
S.D.	90.6	76.5	16.9	83.0	0.12	2
N	5	5	5	5	5	5
69-82	225.2	176.7	13.5	190.2	0.84	93
S.D.	108.8	79.4	14.4	84.2	0.09	2
N	13	13	13	13	13	12

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2n. Summary of recreational Atlantic salmon catch and effort data for Section 52 (Statistical Area 0), 1954-83.

STATISTICAL SECTION:52

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	100	350	150	500	5.00	.
1955	157	107	6	113	0.72	98
1956	.	.	.	.	.	.
1957	337	1007	47	1054	3.13	.
1958	341	800	20	820	2.40	98
1959	487	807	36	843	1.73	96
1960	368	512	35	547	1.49	96
1961	591	664	125	789	1.34	80
1962	585	722	56	778	1.33	92
1963	591	1141	48	1189	2.01	94
1964	1364	1606	86	1782	1.31	93
1965	1271	1347	132	1479	1.16	93
1966	1833	1523	103	1626	0.89	93
1967	920	888	89	977	1.06	94
1968	1023	1893	87	1980	1.94	91
1969	1619	1612	120	1732	1.07	94
1970	2221	1971	107	2078	0.94	94
1971	2038	2732	151	2883	1.41	93
1972	2066	2016	172	2188	1.06	94
1973	4330	5227	447	5674	1.31	92
1974	1998	1428	241	1669	0.84	96
1975	1574	2433	47	2480	1.58	97
1976	2007	2158	141	2299	1.15	95
1977	2135	1987	122	2109	0.99	95
1978	2840	1089	126	1215	0.43	94
1979	1730	2323	149	2472	1.43	88
1980	1521	1987	276	2263	1.49	89
1981	1320	2702	105	2807	2.13	95
1982	2111	1935	167	2102	1.00	94
1983	1807	1578	144	1722	0.95	93
MEANS STANDARD DEVIATIONS N'S:						
53-57	198.0	488.0	67.7	555.7	2.81	98
S.D.	123.7	465.6	74.2	473.0	0.84	.
N	3	3	3	3	3	1
58-62	474.4	701.0	54.4	755.4	1.59	93
S.D.	117.4	121.0	41.5	119.3	0.17	3
N	5	5	5	5	5	5
63-67	1195.8	1319.0	91.6	1410.6	1.18	93
S.D.	469.5	317.0	30.4	326.4	0.14	0
N	5	5	5	5	5	5
68-72	1793.4	2044.8	127.4	2172.2	1.21	93
S.D.	485.0	415.0	34.1	431.6	0.14	0
N	5	5	5	5	5	5
73-77	2408.8	2646.6	199.6	2846.2	1.18	93
S.D.	1094.7	1488.5	154.6	1609.3	0.11	2
N	5	5	5	5	5	5
78-82	1904.4	2007.2	164.6	2171.8	1.14	92
S.D.	599.4	598.2	66.5	596.3	0.30	1
N	5	5	5	5	5	5
69-82	2107.9	2257.1	169.4	2426.5	1.15	93
S.D.	741.5	966.6	97.9	1032.4	0.10	1
N	14	14	14	14	14	14

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 2o. Summary of recreational Atlantic salmon catch and effort data for Section 53 (Statistical Area 0), 1964-83.

STATISTICAL SECTION:53

YEAR	EFFORT ROD DAYS	GRILSE <2.7KG	SALMON >2.7KG	TOTAL CATCH	CUE	PERCENT GRILSE
1953	.	.	.	.	.	.
1954	.	.	.	.	.	.
1955	.	.	.	.	.	.
1956	.	.	.	.	.	.
1957	.	.	.	.	.	.
1958	.	.	.	.	.	.
1959	.	.	.	.	.	.
1960	.	.	.	.	.	.
1961	.	.	.	.	.	.
1962	.	.	.	.	.	.
1963	.	.	.	.	.	.
1964	44	18	3	21	0.48	.
1965	278	57	75	132	0.47	19
1966	397	367	252	619	1.56	18
1967	468	119	106	225	0.48	78
1968	748	192	222	414	0.55	35
1969	.	.	.	.	.	.
1970	420	275	129	404	0.96	.
1971	523	171	82	253	0.48	77
1972	690	450	170	620	0.90	50
1973	700	533	128	661	0.94	78
1974	469	101	268	369	0.79	67
1975	245	379	117	496	2.02	46
1976	928	891	368	1259	1.36	51
1977	809	688	533	1221	1.51	63
1978	673	875	432	1307	1.94	61
1979	1101	595	323	918	0.83	73
1980	711	677	231	908	1.28	72
1981	446	667	195	862	1.93	78
1982	742	784	363	1147	1.55	65
1983	694	468	136	604	0.87	85
MEANS STANDARD DEVIATIONS N'S:						
53-57	.	.	.	.	.	.
S.D.	.	.	.	.	.	.
N	.	.	.	.	.	.
58-62	.	.	.	.	.	.
S.D.	.	.	.	.	.	.
N	.	.	.	.	.	.
63-67	296.8	140.3	109.0	249.3	0.84	51
S.D.	185.8	156.8	104.6	260.2	0.34	23
N	4	4	4	4	4	3
68-72	595.3	272.0	150.8	422.8	0.71	54
S.D.	150.8	126.9	59.6	150.7	0.11	12
N	4	4	4	4	4	3
73-77	630.2	518.4	282.8	801.2	1.27	62
S.D.	273.8	300.6	174.3	413.9	0.15	4
N	5	5	5	5	5	5
78-82	734.6	719.6	308.8	1028.4	1.40	69
S.D.	235.6	110.0	96.6	191.1	0.24	3
N	5	5	5	5	5	5
68-82	650.5	545.1	256.8	801.9	1.23	66
S.D.	229.2	256.2	138.5	362.9	0.12	2
N	13	13	13	13	13	12

PERCENT GRILSE FIGURES ARE CALCULATED USING LAGGED GRILSE VALUES
. IN THE ABOVE TABLE INDICATES NO DATA FOR THAT YEAR

Appendix 3. Final Atlantic salmon catch statistics for the 1983 commercial fishery. Statistical Areas K, L, M, and N (Gulf Region) are included. Weight in metric tonnes.

Statistical Area	Small		Large		Total	
	Wt.	No.	Wt.	No.	Wt.	No.
A	98	53,542	93	20,401	191	73,943
B	73	36,695	53	11,901	126	48,596
C	27	13,688	31	7,265	58	20,953
D	12	6,432	19	4,086	31	10,518
E	7	3,741	16	3,478	23	7,219
F	9	4,838	15	3,438	24	8,276
G	7	3,891	2	447	9	4,338
H	10	5,084	13	2,767	23	7,851
I	7	3,581	6	1,288	13	4,869
J	19	9,965	66	15,100	85	25,065
K	11	7,201	9	2,218	20	9,419
L	9	4,693	4	833	13	5,526
M	24	13,082	7	1,523	31	14,605
N	5	2,432	2	446	7	2,878
O	96	48,392	271	59,719	367	108,111
Insular Nfld.	318	168,865	336	75,191	654	244,056
Labrador	96	48,392	271	59,719	367	108,111
Provincial	414	217,257	607	134,910	1,021	352,167